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LASA TRAVEL-TIME DATA AT THE SDL

5 December 1966

Prepared For

AIR FORCE TECHNICAL APPLICATIONS CENTER

Washington, D. C.

By

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EARTH SCIENCES DIVISION
TELEDYNE INDUSTRIES, INC.

Under

Project VELA UNIFORM

Sponsored By

ADVANCED RESEARCH PROJECTS AGENCY
Nuclear Test Detection Office
ARPA Order No. 624

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LASA TRAVEL-TIME DATA AT THE SDL

SEISMIC DATA LABORATORY REPORT NO. 172

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TABLE OF CONTENTS

ABSTRACT

Travel-time data at the SDL, as read from LASA films for approximately 400 events, are presented for users. These data have been used for computing travel-time anomalies which are included in SDL reports No. 147 and No. 159.

1. INTRODUCTION

During the last six months, SDL has been accumulating relative travel-times at the Montana Large Aperture Seismic Array with a view towards computing travel-time anomalies at the 21 subarrays. It appears that these raw data are in demand and may be of some use to the seismic community in general. Therefore, this report contains all pertinent travel-time data which have been used for the following previously published reports:

"Relative Travel-Time Anomalies at LASA and the Location of Epicenters using SHIFT," by E. F. Chiburis, SDL Report No. 147.

"LASA Travel-Time Anomalies for Various Epicentral Regions," by E. F. Chiburis," SDL Report No. 159.

The data in the Appendix are listed in the same order as given in SDL Report No. 159, except that more events are now included and some regions have been slightly re-defined.

The following numbered explanation, with references to the first page of the Appendix, describes the method of presentation:

1. Arbitrary region name
2. Direction of approach
3. Distance range for events included in region
4. Azimuth range for events included in region
5. Event date and name
6. PDE latitude
7. PDE longitude

8. PDE depth

9. PDE origin time

10. Arrival time in seconds*:

First row, left to right:	B1, B2, B3, B4, C1, C2, C3
Second row:	C4, D1, D2, D3, D4, E1, E2
Third row:	E3, E4, F1, F2, F3, F4, AO

11. Arrival time, hour and minute at LASA

Note: As only relative times were needed, absolute times may not be correct. Clock corrections prior to December 1965 were not obtainable.

It is requested that any use or presentation of these data be appropriately acknowledged.

*An arrival time of "0." indicates no reading made at that subarray.

APPENDIX

12 22 00 PAGE 1

(1) CENTRAL AND SOUTHERN ALASKA (2) NW (3) (4)

(5) 19 AUGOO GULF ALASKA 59 30 00. N 149 30 00. W (6) (7) (8) 2850 - 3350 KM 313-320AZ (9) 03 10 04.2 (10) (11)

37.11	37.38	38.36	38.27	38.43	36.01	37.47		0315
39.73	37.34	39.00	38.48	38.33	34.35	41.90		
39.40	35.05	37.13	44.00	37.41	28.95	36.87		
19 AUGOO SU ALASKA 1		60 24 00. N		140 00 00. W		09.	13 36 23.7	
0.	0.	0.	0.	0.	0.	0.		1341
0.	0.	0.	0.	0.	0.	0.		
22.22	02.79	08.21	79.41	07.10	98.30	00.42		
02 SEP00 SU ALASKA		60 12 00. N		140 24 00. W		031.	22 46 39.5	
23.51	23.71	22.95	22.85	22.87	24.42	23.84		2252
0.	23.40	25.54	22.84	21.01	0.	26.14		
0.	19.21	23.33	31.15	23.70	19.41	23.2		
09 APR00 SU. ALASKA		60 12 0. N		147 00 0. W		34.	10 51 45.0	
28.74	27.16	28.11	27.00	27.90	29.00	29.00		1037
27.40	29.08	30.27	25.03	20.10	0.	33.30		
31.40	29.03	28.70	30.20	29.10	0.	26.44		
00 AUG00 S ALASKA		59 30 0. N		147 10 0. W		37.	00 38 41.5	
0.	0.	0.	27.00	27.12	0.	28.23		0044
29.40	29.25	27.70	27.37	25.30	0.	0.		
0.	28.77	27.70	33.00	0.	19.70	27.80		
30 AUG00 SU ALASKA		61 10 00. N		147 30 00. W		036.	20 20 54.0	
41.82	42.13	41.27	40.08	0.	42.51	41.95		2020
40.46	41.92	43.50	41.17	39.15	35.00	46.11		
44.40	37.95	41.35	49.30	42.27	33.30	41.45		
22 AUG00 S. ALASKA		61 24 00. N		147 42 00. W		053.	11 36 53.7	
0.	0.	38.95	38.70	38.83	40.40	39.90		1144
34.32	37.72	41.40	39.00	37.00	36.70	43.90		
42.31	39.73	39.27	47.30	40.34	31.38	39.27		
01 SEP00 SU ALASKA		61 48 00. N		149 30 00. W		077.	23 19 09.8	
53.30	53.77	52.85	52.40	52.24	54.17	53.70		2324
52.11	53.51	0.	52.70	0.	50.50	57.91		
50.04	54.05	52.97	50.90	54.13	55.15	53.12		
15 AUG00 SU ALASKA 2		61 12 00. N		150 00 00. W		98.	19 37 16.0	
55.25	55.77	0.	57.47	57.35	59.14	0.		1942
57.03	60.04	64.40	0.	60.02	0.	0.		
0.	59.28	0.	73.79	0.	60.14	60.02		
24 AUG00 S ALASKA		61 12 0. N		151 00 0. W		129.	08 22 38.7	
33.40	33.00	0.	34.35	32.00	34.20	33.85		0420
32.24	33.00	32.20	32.95	30.03	30.90	37.75		
0.	27.00	32.71	41.20	34.85	0.	33.20		
27 APR00 SU. ALASKA		61 00 0. N		152 00 0. W		108.	10 24 59.0	
38.27	35.38	27.01	27.40	27.71	29.11	38.50		1034
30.94	30.00	40.00	37.33	33.00	0.	0.		
0.	0.	0.	0.	0.	0.	33.00		
00 SEP00 S. ALASKA		60 24 00. N		152 10 00. W		91.	23 28 07.8	
68.97	67.32	68.85	68.10	68.10	69.00	69.23		2333
67.00	67.36	70.75	69.30	69.40	66.40	73.48		
71.30	67.75	67.05	75.91	69.45	66.90	68.00		

NORTHEAST KODIAK NW 3200 - 3300 KM 307-311AZ

04 JUN05 KODIAK I		57 24 00. N	151 00 00. W		033.	10 38 22.0	
0.	0.	0.	0.	33.33	0.	0.	1044
32.58	34.50	35.72	33.15	31.41	31.84	38.80	
0.	29.72	35.00	41.30	33.33	26.15	33.60	
22 APR06 KODIAK		56 54 0. N	151 43 0. W		33.	10 15 51.0	
54.20	54.52	53.55	53.20	53.00	55.08	54.30	1021
52.73	54.87	0.	53.34	51.70	52.12	53.17	
50.20	50.00	53.45	61.40	0.	46.40	53.90	
30 DEC05 KODIAK I.		58 06 00. N	152 24 00. W		33.	16 33 43.4	
00.00	00.00	00.00	00.00	00.00	00.00	49.93	1639
00.00	50.28	51.35	48.93	47.20	00.00	54.50	
51.90	43.45	50.33	57.12	49.73	41.90	49.40	
19 MAR06 KODIAK		57 42 0. N	153 00 0. W		2.	08 10 47.0	
59.87	60.15	59.15	58.93	59.28	60.05	60.12	0016
58.50	60.46	0.	59.20	57.38	57.68	0.	
0.	59.73	60.72	67.20	59.72	52.00	59.60	
22 DEC05 KODIAK I		58 22 48. N	153 04 12. W		51.	19 41 23.0	
0.	0.	0.	0.	30.10	31.70	31.10	1947
29.60	31.45	32.60	30.10	28.45	28.75	35.60	
33.00	20.70	31.65	38.40	30.90	23.10	30.60	

SOUTHERN KODIAK NW 3350 - 3400 KM 305-308AZ

29 AUG06 KODIAK		56 18 00. N	153 00 00. W		033.	22 30 22.8	
33.08	33.41	32.33	32.10	0.	33.98	33.18	2236
31.62	33.69	34.70	32.10	30.33	0.	0.	
34.82	28.78	34.42	40.00	32.13	25.28	32.69	
04 MAR06 KODIAK		57 00 0. N	153 24 0. W		33.	14 19 31.0	
41.68	41.92	41.06	40.78	41.10	42.35	41.80	1425
40.23	42.30	43.48	40.80	39.25	39.50	0.	
43.52	37.37	42.78	40.88	0.	33.70	41.42	
16 APR06 KODIAK 1		57 00 0. N	153 36 0. W		33.	01 27 15.3	
28.38	28.78	27.74	27.47	27.60	29.20	28.58	0133
27.00	29.06	30.20	27.60	25.92	26.29	33.23	
30.34	24.13	29.49	35.59	0.	20.54	28.13	
16 APR06 KODIAK 2		57 00 0. N	153 42 0. W		33.	04 40 45.0	
57.39	57.60	56.70	56.50	56.72	58.19	57.50	0446
55.97	58.00	59.11	56.50	54.80	55.20	62.10	
59.13	53.10	58.40	64.45	56.78	49.48	57.05	
22 JAN06 KODIAK		56 . N	153 42 . W		33.	14 27 07.9	
20.78	21.05	20.10	20.05	20.10	21.00	0.	1433
19.60	21.40	22.50	20.00	18.35	18.90	25.75	
22.53	10.55	22.15	27.05	20.05	13.00	20.55	

ALASKA PENINSULA NW 3500 - 3700 KM 301-311AZ

10 JUN90 ALASKA PEN 57 24 00. N 155 42 00. W 067. 14 12 15.0

32.60	32.94	31.97	31.71	32.07	33.48	32.76	1418
31.27	33.22	34.31	31.80	30.27	0.	0.	
0.	0.	0.	0.	0.	0.	32.26	

23 DEC89 ALASKA PEN. 56 36 00. N 155 54 00. W 121. 02 14 49.0

0.	0.	0.	60.65	0.	62.65	0.	0220
60.30	62.25	53.40	00.00	59.15	59.40	00.00	
0.	57.50	62.40	0.	61.65	53.68	61.38	

29 APR90 ALASKA PEN. 53 48 00. N 157 48 00. W 33. 01 46 43.0

13.25	13.58	12.50	12.40	12.78	14.21	13.33	0153
11.67	14.15	14.65	12.31	10.94	11.60	10.14	
14.75	09.04	15.06	0.	11.62	05.85	12.91	

UNIMAK I. NW 4050 - 4100 KM 303-304AZ

16 SEP90 UNIMAK 54 06 00. N 163 30 00. W 039. 02 48 21.8

25.32	25.56	24.62	24.42	24.79	26.16	25.31	0255
23.97	20.00	26.84	24.30	23.02	23.58	30.15	
26.70	21.05	26.08	0.	23.90	17.94	24.92	

19 MAY90 UNIMAK I 54 00 . N 163 42 . W 35. 09 18 35.0

0.	39.55	38.52	38.35	38.75	40.12	39.32	0425
37.85	40.08	40.73	38.27	37.00	37.63	44.02	
40.64	35.08	40.90	45.05	37.80	31.96	38.88	

27 FEB90 UNIMAK 53 54 0. N 164 00 0. W 40. 20 43 00.3

67.12	67.13	66.15	66.12	0.	67.90	67.00	2049
65.70	67.92	0.	66.05	64.65	65.35	71.75	
64.29	62.78	66.53	73.37	65.58	59.08	66.60	

30 DEC89 UNIMAK 54 16 00. N 164 18 00. W 28. 02 06 31.1

00.00	00.00	00.00	00.00	00.00	00.00	39.75	0213
00.00	40.50	41.05	38.70	37.45	38.00	44.42	
41.12	39.40	41.22	40.05	38.25	32.50	39.32	

02 JAN90 UNIMAK 54 18 00. N 164 30 00. W 57. 04 52 17.1

0.	0.	0.	23.30	23.55	25.00	24.10	0459
22.75	24.90	25.55	23.20	21.80	22.45	28.80	
00.00	20.05	25.65	30.52	22.75	16.80	23.75	

FOX IS NE 4300 - 4625 KM 300-304AZ

07 MAY66 FOX IS 53 36 . N 167 16 . W 55. 17 09 16.0
37.20 37.33 36.41 36.29 36.53 37.92 37.10 1716
35.72 37.78 0. 36.10 34.76 35.35 41.72
38.40 32.91 36.45 0. 35.73 29.82 36.70
15 MAY66 FOX IS 53 24 . N 167 48 . W 33. 04 34 11.0
0. 37.42 36.45 36.30 36.65 38.00 37.20 0441
35.80 0. 36.55 36.24 34.90 0. 41.30
38.55 33.08 38.66 43.42 35.85 29.99 36.85
16 MAY66 FOX IS 53 24 00. N 167 54 00. W 015. 23 16 35.0
63.63 63.92 62.96 62.80 63.16 64.48 63.70 2323
62.30 64.34 0. 62.68 61.42 61.95 68.20
65.00 59.52 65.23 64.90 62.23 56.45 63.28
05 MAY66 FOX IS 53 24 . N 168 42 . W 25. 00 22 27.0
58.58 58.76 57.82 57.80 58.00 59.40 58.58 0029
57.20 0. 0. 57.53 56.30 56.98 63.18
59.90 54.48 60.16 64.75 57.23 51.38 58.22
24 APR66 FOX IS 52 42 . N 168 54 . W 68. 15 13 36.1
65.38 65.68 64.70 64.53 64.90 66.20 65.38 1520
64.03 66.13 0. 64.41 63.13 63.85 70.00
66.69 61.28 67.00 71.50 63.80 58.30 65.07
16 FEB66 FOX IS. 52 24 00. N 169 36 00. W 47. 11 58 14.2
49.80 0. 49.12 49.02 49.33 0. 49.88 1205
48.52 0. 51.28 0. 0. 48.40 54.47
51.15 45.88 51.50 55.90 48.40 42.75 49.51
03 JUL66 FOX 52 30 00. N 170 12 00. W 069. 03 55 15.7
51.60 0. 50.98 50.82 0. 52.45 51.70 0402
50.29 52.38 53.06 50.62 49.42 50.10 56.18
52.90 47.60 53.15 57.72 50.14 44.53 51.28
30 MAR66 FOX IS. 51 54 0. N 170 36 0. W 33. 05 46 31.0
13.28 13.35 0. 12.29 0. 13.90 13.18 0554
11.73 13.90 14.43 12.06 10.65 11.67 17.73
14.36 09.08 14.76 19.20 11.64 06.10 12.83
04 DEC65 FOX IS. 51 18 0. N 170 36 0. W 18. 02 11 49.9
0. 0. 0. 36.10 36.45 37.60 36.90 0219
35.55 37.70 38.30 35.65 34.70 35.40 41.40
0. 32.78 0. 42.68 0. 29.95 36.52
30 NOV65 FOX IS 52 42 0. N 171 48 0. W 134. 12 37 26.0
62.25 62.40 61.50 61.40 61.80 63.00 62.15 1244
60.90 62.95 63.60 61.15 60.00 60.50 66.70
63.48 58.20 63.55 68.20 60.60 55.05 61.78

ANDREANOF IS NM 4750 - 5200 KM 502-505A2

19 JUL66 ANDREANOF 51 42 00. N 175 18 00. W 047. 19 20 33.4
26.70 20.98 26.04 27.90 28.28 29.52 28.75 1928
27.30 29.50 30.05 27.00 26.47 27.16 33.21
29.90 24.73 0. 34.07 27.25 21.08 28.40

23 JUL66 ANDREANOF-3 51 48 00. N 175 24 00. W 041. 14 39 48.3
45.13 42.33 44.32 44.25 44.62 45.89 45.12 1447
43.71 42.02 46.42 44.06 42.66 43.58 49.56
46.22 41.07 46.57 51.04 43.50 38.04 44.75

22 JUL66 ANDREANOF 51 42 00. N 175 30 00. W 056. 10 17 22.5
16.10 16.26 17.25 17.15 17.41 16.73 17.94 1025
16.60 16.06 19.19 16.93 15.63 16.43 22.38
19.03 13.96 0. 23.06 16.36 11.00 17.62

23 JUL66 ANDREANOF-2 51 42 00. N 175 30 00. W 059. 14 31 51.2
46.38 40.53 45.68 45.45 45.84 47.14 46.33 1439
44.97 47.13 47.74 45.31 44.11 44.62 50.79
47.51 42.27 47.07 52.25 44.62 39.32 45.96

23 JUL66 ANDREANOF-1 51 42 00. N 175 36 00. W 041. 03 37 55.8
53.04 53.28 52.34 52.19 52.60 53.87 53.01 0345
51.71 53.62 54.48 52.02 50.63 51.60 57.60
54.33 49.05 54.65 59.11 51.64 46.10 52.74

15 NOV65 ANDREANOF 51 54 0. N 175 48 0. W 46. 07 13 04.0
00.00 00.00 00.00 00.00 60.65 00.00 61.15 0720
0. 61.75 0. 0. 58.80 59.26 65.45
62.20 57.00 62.55 66.95 59.00 54.05 60.70

24 OCT65 ANDREANOF 52 00 00. N 175 18 00. W 049. 03 39 07.7
10.35 10.54 09.61 09.48 09.90 11.15 10.50 0347
09.15 10.95 11.70 09.35 08.05 08.70 14.70
11.55 06.36 11.40 10.20 06.95 03.30 09.95

22 NOV65 ANDREANOF-1 52 00 0. N 176 06 0. W 49. 14 00 27.0
0. 0. 0. 33.00 33.38 34.62 33.85 1408
32.60 34.32 35.18 33.00 31.65 32.17 38.10
35.00 29.90 35.04 39.70 32.52 0. 33.58

03 MAY66 ANDREANOF 51 36 . N 176 48 . W 20. 12 06 54.0
08.20 00.42 07.50 07.33 07.68 08.93 08.19 1215
06.87 00. 09.44 07.20 05.99 06.26 12.50
09.32 04.20 09.34 13.96 06.63 01.18 07.84

26 JAN66 ANDREANOF 51 42 0. N 177 00 0. W 54. 19 07 14.4
26.20 20.50 25.50 0. 25.70 27.05 26.28 1915
24.95 20.79 27.63 25.33 24.08 24.55 30.55
27.53 22.36 27.48 32.22 24.95 19.20 26.02

09 MAR66 ANDREANOF 51 54 0. N 177 12 0. W 52. 06 11 04.0
15.01 13.23 14.31 14.20 14.53 15.80 15.02 0819
13.77 13.25 15.91 0. 12.82 13.28 19.31
16.13 11.02 16.04 20.00 13.62 07.93 14.73

24 FEB66 ANDREANOF 51 48 00. N 177 18 00. W 65. 18 54 35.0
46.40 46.61 45.72 45.00 0. 0. 0. 1902
0. 0. 0. 45.40 44.20 44.80 0.
0. 42.40 47.01 0. 0. 39.43 46.12

05 JAN66 ANDREANOF 51 12 0. N 178 06 0. W 33. 07 01 58.0
17.85 16.03 17.20 16.95 17.30 18.60 17.73 0710
0. 0. 0. 15.65 0. 16.15 22.00
19.00 15.00 0. 23.05 16.40 10.70 17.52

15 MAY66 ANDREANOF 51 30 . N 178 24 . W 31. 14 46 05.5
0. 27.40 26.61 25.40 26.74 27.94 27.30 1454
25.91 27.77 23.35 25.30 25.02 25.50 31.50
20.51 23.41 20.15 33.13 26.04 20.30 25.90

CONTINUE

17 MAY66 ANDREANOF		51 12 . N	178 18 . W		15.	09 11 51.0	
14.40	14.00	13.05	13.55	13.85	15.12	14.35	0920
13.10	14.96	0.	13.45	12.10	12.06	18.60	
15.50	10.44	15.45	20.22	13.03	07.38	14.04	
27 MAY66 ANDREANOF		51 24 00. N	178 30 00. W		033.	22 07 43.4	
0.	65.07	64.25	64.13	64.45	0.	65.01	2215
63.61	65.61	66.41	64.03	62.81	63.28	69.18	
60.14	61.05	65.98	70.00	63.62	57.92	64.60	
04 MAR66 ANDREANOF		51 30 0. N	178 36 0. W		53.	11 35 03.4	
22.55	22.75	21.90	21.75	22.17	23.50	22.60	1143
21.28	23.18	23.90	21.58	20.42	20.83	26.82	
23.80	18.60	23.69	26.45	21.30	15.58	22.25	
03 MAY66 ANDREANOF		51 30 . N	178 48 . W		30.	02 [illegible] 09.0	
30.45	30.68	29.05	29.01	29.90	31.23	30.42	0300
29.18	31.05	31.73	29.45	28.35	28.83	34.76	
31.72	20.52	31.68	30.31	29.22	23.42	30.18	
12 DEC65 ANDREANOF		51 30 0. N	178 54 0. W		50.	00 48 01.7	
0.	0.	0.	0.	22.50	23.70	23.00	0056
21.70	23.45	24.35	22.05	20.75	21.30	27.25	
24.25	19.10	24.00	20.85	21.75	16.05	22.65	
25 MAR66 ANDREANOF		51 30 0. N	179 36 0. W		33.	12 54 55.7	
22.30	22.43	21.53	0.	21.77	22.98	22.28	1303
20.93	22.70	23.58	21.37	19.98	0.	26.40	
23.51	18.28	0.	28.13	21.10	15.30	21.93	
23 NOV65 ANDREANOF		51 24 0. N	179 42 0. W		48.	02 17 49.4	
0.	0.	0.	14.05	14.35	15.70	15.00	0225
13.70	15.35	16.22	14.00	12.65	13.10	19.10	
10.20	11.00	15.90	20.90	13.70	.	14.60	
22 NOV65 ANDREANOF-2		51 18 0. N	179 48 0. W		40.	20 25 30.4	
0.	0.	0.	55.70	56.10	57.40	56.70	2033
55.40	57.10	00.00	00.00	54.40	54.05	60.75	
57.60	52.05	57.50	62.40	55.40	00.00	56.20	

RAT - NEAR IS NW 5200 - 5075 KM 504-510A2

29 OCT05 ANGNITKA 51 20 17. N 177 19 57. E 000. 21 00 00.1

00.00	00.00	00.00	00.00	01.65	32.00	32.10	2108
30.80	32.45	00.00	31.05	00.00	00.00	30.25	
33.25	20.15	32.95	37.90	30.80	25.05	31.70	

06 DEC05 RAT IS. 50 50 0. N 177 24 0. E 37. 01 22 36.0

0.	0.	0.	0.	17.60	0.	16.25	0131
17.00	16.72	0.	17.25	16.07	16.50	22.30	
17.32	14.40	19.15	25.45	16.90	11.33	17.90	

11 NOV05 RAT IS 51 42 00. N 178 12 00. E 104. 02 21 24.4

00.00	00.00	00.00	00.00	00.15	61.40	0.	0229
59.50	0.	62.00	59.60	58.60	58.99	64.85	
61.95	57.05	61.40	60.45	59.65	53.75	60.40	

13 MAY06 RAT IS 51 00 00. N 178 12 00. E 033. 07 54 42.0

28.38	28.58	27.65	27.48	27.84	29.08	28.33	0903
27.01	28.98	29.72	27.38	28.10	28.65	0.	
29.50	0.	0.	34.22	27.04	21.29	28.00	

02 JUN06 RAT IS 51 00 00. N 178 00 00. E 041. 03 27 53.3

0.	38.83	37.90	37.75	38.04	39.27	0.	0336
37.22	37.13	39.78	37.69	36.32	36.72	42.52	
39.73	34.72	0.	44.32	37.43	31.46	38.24	

26 MAR06 RAT IS 50 54 0. N 175 54 0. E 44. 13 16 48.0

34.53	34.75	33.96	33.73	34.03	0.	34.52	1345
33.26	33.02	33.83	33.39	32.33	32.72	33.61	
35.70	30.75	0.	40.27	33.40	27.63	34.20	

26 FEB06 NEAR IS 52 24 00. N 173 30 00. E 51. 00 33 50.1

40.31	40.65	39.72	39.53	39.70	0.	40.40	0042
39.12	43.65	41.65	39.50	38.16	38.35	44.38	
41.70	38.65	40.90	40.20	39.44	33.38	40.10	

08 APR06 NEAR IS. 52 18 0. N 173 30 0. E 45. 23 46 50.8

41.61	0.	40.89	40.70	40.97	42.22	41.70	2355
40.33	41.87	43.00	40.00	39.33	39.91	45.53	
42.93	37.87	0.	47.45	40.78	34.53	41.27	

05 DEC05 NEAR IS. 52 30 0. N 173 12 0. E 36. 18 14 50.2

0.	0.	0.	42.50	42.70	43.90	43.30	1523
42.10	43.55	44.90	42.90	41.10	41.20	47.20	
44.60	39.25	43.70	49.10	42.40	36.25	42.92	

24 FEB06 NEAR IS 52 30 00. N 172 30 00. E 65. 15 40 00.8

60.00	0.	59.55	59.30	59.58	60.85	60.28	0548
58.90	60.48	61.05	0.	58.00	58.18	64.20	
61.60	56.50	60.48	66.05	59.39	53.10	59.90	

13 JAN06 NEAR IS. 52 54 00. N 172 00 00. E 14. 10 41 11.0

11.05	11.40	11.55	10.35	10.60	11.75	11.20	1050
10.00	11.35	12.41	10.30	08.91	09.15	13.05	
12.62	07.55	11.35	10.90	0.	04.23	10.82	

17 NOV05 NEAR IS 52 18 0. N 172 30 0. E 33. 16 41 47.0

0.	0.	0.	0.	51.55	0.	0.	1050
50.72	52.25	53.25	51.15	49.90	50.05	55.90	
43.35	40.35	52.35	57.00	51.20	0.	51.68	

23 DEC05 NEAR IS. 52 42 00. N 172 00 00. E 64. 01 59 27.0

0.	0.	0.	14.00	13.05	16.20	13.70	0208
14.37	13.85	16.90	14.75	13.35	13.00	19.65	
17.00	11.90	15.35	21.50	14.05	08.00	13.27	

16 JAN06 NEAR IS. 52 54 0. N 171 54 0. E 25. 09 11 50.0

47.85	46.05	47.35	47.05	47.30	48.50	49.05	0920
46.72	46.21	49.2	47.10	45.60	45.85	51.80	
44.35	44.21	46.35	53.90	0.	40.90	47.66	

CONTINUED

02 MAR66 NEAR IS 52 34 00. N 172 18 00. E 40. 11 51 20.7
17.00 17.25 16.45 16.22 16.48 17.70 17.11 1200
15.80 17.35 18.30 16.20 14.65 15.12 21.10
16.52 15.45 17.20 22.67 16.30 10.00 16.78
08 JUN66 NEAR 53 06 00. N 171 06 00. E 020. 19 56 21.3
23.61 25.95 23.10 22.80 22.98 24.20 23.85 2005
22.50 23.92 0. 22.80 21.46 21.62 27.67
25.20 20.09 23.90 29.50 23.15 15.76 23.43
14 JUL66 NEAR 53 06 00. N 171 06 00. E 029. 18 07 04.1
64.73 65.10 64.14 64.00 64.20 65.40 64.93 1815
63.63 65.00 66.20 64.05 62.72 62.80 68.65
0. 61.24 65.12 70.75 0. 57.73 64.52
10 APR66 NEAR IS 53 06 0. N 171 00 0. E 20. 10 39 51.0
52.60 52.92 52.14 51.00 52.04 53.29 52.84 1048
51.42 52.86 54.02 51.80 50.40 50.56 56.56
54.21 49.06 52.64 56.00 52.05 45.65 52.35
01 DEC65 NEAR IS. 51 48 0. N 172 06 0. E 033. 07 26 25.0
0. 0. 0. 25.20 0. 26.56 26.02 0735
24.72 26.27 27.25 25.05 23.80 23.93 0.
0. 22.27 26.42 31.77 25.00 19.05 25.50
14 NOV65 NEAR IS A 53 18 00. N 170 18 00. E 33. 13 28 33.0
0. 0. 0. 37.00 37.78 38.97 38.55 1337
37.20 00. 39.70 00. 36.20 36.30 42.30
00. 34.90 00. 00. 00. 31.35 38.07

KAMCHATKA -KOMANDORSKY NW 5850 - 6000 KM 312-315AZ

19 JUL80 KOMANDORSKY 55 12 00. N 164 54 00. E 14. 01 40 53.9
08.30 08.79 08.12 07.70 07.75 08.93 08.82 0150
07.41 08.48 09.08 07.97 08.35 08.18 12.11
10.47 05.32 0. 14.59 08.92 01.53 08.24

16 JAN80 KOMANDORSKY 54 54 00. N 163 48 00. E 15. 19 44 39.5
55.60 55.90 55.25 55.00 55.10 0. 56.00 1953
54.60 0. 0. 55.00 53.55 53.45 59.40
57.55 52.45 55.55 01.05 55.78 48.75 55.50

25 NOV85 KAMCHATKA 55 12 0. N 163 00 0. E 33. 03 35 11.7
34.78 35.37 34.60 34.25 34.28 35.50 35.40 0344
33.98 35.08 36.38 0. 32.72 32.75 38.63
36.92 31.85 0. 41.00 35.28 28.20 34.78

18 NOV85 KAMCHATKA 53 54 0. N 160 42 0. E 12. 21 58 12.4
0. 0. 0. 0. 0. 0. 52.85 2207
51.47 52.48 0. 51.97 50.45 0. 0.
54.47 0. 0. 56.40 52.72 45.90 52.35

20 FEB86 KAMCHATKA 53 06 00. N 159 48 00. E 44. 05 58 09.6
51.29 51.83 51.13 50.84 50.84 0. 51.85 0607
50.54 51.50 52.02 50.99 0. 49.27 55.13
53.38 48.53 0. 57.45 51.74 44.90 51.30

19 APR86 E KAMCHATKA 53 06 0. N 159 18 0. E 62. 20 25 42.5
23.43 23.84 23.25 0. 23.00 24.13 0. 2036
22.70 23.57 0. 0. 21.45 21.55 0.
25.65 20.71 0. 29.02 23.93 16.95 23.48

05 FEB86 KAMCHATKA C 52 48 0. N 159 48 0. E 44. 14 24 45.0
31.39 31.85 31.20 30.85 0. 0. 0. 1434
30.63 31.53 32.05 31.04 29.56 29.38 35.16
33.44 20.53 31.32 37.45 31.56 24.09 31.39

21 DEC85 KAMCHATKA 52 36 00. N 156 48 00. E 67. 00 32 00.7
00.00 00.00 00.00 00.00 00.00 00.00 45.25 0041
00.00 45.00 45.20 44.50 43.05 42.75 43.40
46.70 41.95 0. 0. 45.20 38.43 44.80

06 APR86 KAMCHATKA 2 51 12 0. N 157 48 0. E 48. 05 24 44.6
39.73 40.10 39.58 39.28 39.32 40.48 0. 0534
39.01 40.06 41.20 39.49 38.02 37.77 43.48
41.67 36.93 39.76 45.05 40.02 33.47 39.77

06 APR86 KAMCHATKA 1 51 12 0. N 157 42 0. E 47. 01 46 44.9
39.80 40.20 39.50 39.20 39.25 40.40 40.23 0156
38.93 40.00 41.22 39.41 37.95 37.80 43.48
41.65 36.92 39.75 45.02 39.97 33.50 39.80

28 JAN86 KAMCHATKA C 51 36 0. N 157 00 0. E 11. 22 38 12.2
62.93 60.42 62.77 62.38 62.50 63.78 63.46 2247
62.28 60.21 64.42 62.05 61.22 61.02 66.70
64.95 60.22 63.00 60.00 63.28 56.10 63.03

22 JAN86 KAMCHATKA 51 24 00. N 156 54 00. E 151. 14 31 01.0
46.60 47.10 46.51 46.15 46.15 47.30 47.20 1440
45.83 0. 0. 0. 0. 44.05 50.30
48.00 45.90 46.07 52.40 46.85 40.42 46.50

KURILE IS AND SEA OF OKHOTSK NORTHERN GROUP NW 0600 - 1075 KM 311-316AZ

21 JUN66 KURILE			50 36 00. N	157 45 00. E	014.		23 06 25.9	
30.70	31.26	30.59	30.22	30.34	31.46	31.25		2316
29.99	31.04	32.17	30.30	29.13	28.90	34.58		
32.55	27.90	30.88	30.50	30.78	24.50	30.70		
08 APR66 KURILE			50 36 0. N	155 42 0. E	200.		23 05 36.0	
21.68	22.20	21.41	21.11	21.16	22.32	22.13		2315
20.80	21.86	00.00	21.31	19.88	19.68	25.28		
23.40	18.79	21.04	27.31	21.76	15.40	21.58		
20 DEC65 KURILE IS			50 24 00. N	150 36 00. E	033.		07 12 33.7	
00.00	00.00	00.00	00.00	38.20	39.40	00.00		0722
37.90	38.85	40.00	38.25	36.95	36.68	42.32		
00.00	35.90	38.68	00.00	38.75	32.43	38.60		
11 DEC65 KURILE IS			50 50 00. N	155 16 00. E	110.		12 16 59.9	
0.	0.	0.	60.30	60.32	61.50	61.27		1226
60.02	60.98	62.18	60.45	59.10	58.77	64.43		
62.60	50.05	0.	60.40	61.02	54.07	60.75		
24 OCT65 KURILE IS			49 42 00. N	150 00 00. E	030.		18 15 04.9	
17.74	19.06	17.35	17.10	17.15	18.40	18.10		1825
16.95	17.90	00.00	17.30	15.95	15.75	21.30		
19.40	14.95	17.75	23.40	17.70	11.65	17.62		
05 FEB66 KURILE IS			50 12 00. N	155 00 00. E	098.		16 16 01.0	
64.72	65.08	64.21	64.22	64.35	65.40	65.16		1025
63.93	65.03	66.10	64.38	63.08	62.90	68.40		
66.58	62.04	64.90	70.32	64.87	58.68	64.72		
22 OCT65 NW OF KURIL			51 36 00. N	153 12 00. E	400.		07 45 26.0	
0.	0.	0.	0.	57.05	0.	58.05		0754
.	0.	0.	0.	55.85	55.55	61.00		
00.00	55.10	57.25	63.10	57.95	51.55	57.55		
05 NOV65 KURILE IS A			49 12 00. N	155 24 00. E	033.		03 03 22.0	
0.	0.	0.	0.	36.03	0.	0.		0313
35.70	0.	0.	0.	0.	0.	40.20		
0.	33.77	00.00	0.	36.47	30.40	36.40		
07 NOV65 KURILE IS			48 54 00. N	154 54 00. E	033.		14 12 38.0	
0.	0.	0.	54.10	54.12	55.30	54.95		1422
53.72	54.73	55.00	54.10	52.92	52.70	58.18		
56.25	0.	0.	60.30	54.51	48.51	54.50		
21 NOV65 KURILE IS			48 24 00. N	154 42 00. E	033.		06 10 56.0	
0.	0.	0.	0.	16.40	0.	17.20		0621
16.10	17.05	18.10	16.40	15.20	15.05	20.40		
18.55	14.15	0.	22.30	16.75	10.90	16.80		
20 FEB66 KURILE			48 00 00. N	155 00 00. E	33.		18 15 50.0	
10.90	11.37	10.62	10.35	10.65	0.	11.28		1026
10.15	11.10	12.29	10.55	0.	09.05	14.51		
0.	00.18	0.	10.35	10.08	04.93	10.90		
03 MAR66 KURILE			48 18 0. N	154 18 0. E	45.		03 25 28.0	
48.50	49.10	48.41	48.22	48.30	49.38	49.07		0335
47.53	45.78	49.85	48.20	47.02	46.70	52.20		
50.23	45.95	48.01	54.03	48.72	42.75	48.55		
12 DEC65 OKHOTSK			50 18 0. N	149 31 0. E	436.		19 25 09.1	
0.	0.	0.	0.	53.40	56.35	56.43		1934
55.20	56.00	0.	55.65	54.25	54.00	59.20		
57.75	0.	55.60	61.40	56.32	50.12	55.90		

SAKHALIN I.-SEA OF JAPAN-HOKKAIDO NW /550 - 8100 KM 312-317AZ

02 MAR66 SAKHLIN I. 47 12 00. N 144 18 00. E 356. 13 04 15.6
39.38 39.85 39.25 38.88 38.81 40.00 39.92 1314
38.70 39.58 40.62 39.12 37.80 37.60 42.75
41.20 37.12 00.00 44.72 39.88 33.88 39.40

27 OCT65 SAKHALIN I 46 00 00. N 142 54 00. E 230. 22 40 17.1
0. 0. 0. 0. 0. 0. 0. 2250
62.58 0. 0. 63.00 61.60 61.30 66.45
0. 60.90 62.95 68.40 63.05 57.65 63.20

19 MAR66 HOKKAIDO 43 18 0. N 145 48 0. E 11. 08 11 40.0
55.02 55.38 54.82 54.58 54.53 55.65 55.40 0822
54.25 55.25 0. 54.05 53.49 53.29 58.32
56.58 52.60 55.13 60.15 55.03 49.48 55.00

18 FEB66 HOKKAIDO 44 18 00. N 143 00 00. E 225. 19 02 51.5
44.80 45.12 44.62 0. 44.38 0. 45.18 1913
44.15 44.92 46.00 44.50 0. 43.05 48.18
46.42 42.50 44.70 50.00 45.22 39.25 44.80

05 MAR66 HOKKAIDO 42 48 0. N 143 06 0. E 120. 04 48 44.5
56.28 56.66 56.07 0. 55.76 56.82 0. 0459
55.50 56.48 57.30 55.92 54.75 54.52 59.57
57.75 53.88 56.33 61.34 56.42 50.77 56.30

17 JUN66 HOKKAIDO 42 24 00. N 142 54 00. E 067. 08 48 33.2
54.48 54.89 54.24 53.95 53.98 55.07 54.80 0859
53.75 54.68 55.64 54.10 52.94 52.70 57.77
56.04 52.10 54.51 59.50 54.67 49.02 54.46

23 JUN66 E SEA JAPAN 43 48 00. N 139 54 00. E 218. 05 01 42.4
0. 48.03 0. 47.28 47.30 48.28 48.18 0512
47.08 47.90 48.90 47.42 46.19 45.94 50.95
49.40 45.50 47.60 52.80 48.22 42.30 47.73

28 FEB66 E SEA JAPAN 43 42 00. N 139 36 00. E 225. 02 02 13.6
19.90 20.27 19.08 19.55 19.36 0. 20.28 0213
19.20 20.08 0. 19.55 18.55 17.98 0.
21.56 17.58 19.02 24.91 20.50 14.55 19.81

KURILE IS SOUTHERN GROUP NW /200 - 7700 KM 311-314AZ

10 FEB66 KURILE 47 12 00. N 150 48 00. E 168. 20 13 33.0
0. 56.37 57.71 57.36 57.58 0. 58.38 2023
57.21 0. 59.20 57.52 56.30 55.98 61.35
59.60 55.33 57.97 63.24 58.00 52.05 57.85
19 NOV65 KURILE IS 45 18 00. N 150 54 00. E 013. 07 14 13.2
0. 0. 0. 0. 0. 62.52 62.30 0724
0. 62.12 0. 61.40 60.32 60.18 65.30
0. 59.32 62.05 67.12 61.75 56.28 61.85
08 MAY66 KURILE 47 54 . N 150 30 . E 33. 08 29 57.0
46.23 46.63 46.00 45.66 45.90 46.85 46.62 0840
45.45 46.53 0. 0. 44.76 44.50 49.64
0. 43.67 46.40 51.41 46.03 40.57 46.19
13 DEC65 KURILE IS 44 42 00. N 150 12 00. E 033. 14 46 10.2
0. 0. 0. 61.00 0. 62.10 61.90 1456
0. 0. 0. 61.00 59.66 0. 64.66
0. 58.90 0. 56.60 61.20 55.80 61.38
22 JUN66 KURILE 45 24 00. N 149 12 00. E 033. 10 50 25.6
0. 17.60 17.00 16.71 0. 17.80 17.62 1901
16.45 17.43 16.46 16.79 15.66 15.48 20.65
18.72 0. 17.32 22.43 17.22 11.48 17.15
18 DEC65 KURILE IS 44 42 00. N 149 54 00. E 033. 08 30 45.8
00.00 00.00 00.00 00.00 36.90 37.95 37.68 0841
36.60 37.62 38.50 36.90 35.80 35.65 40.78
38.83 34.80 37.52 42.50 37.15 31.70 37.30
24 OCT65 KURILE IS 49 00 00. N 149 18 00. E 048. 18 45 38.3
0. 32.20 0. 0. 31.35 0. 0. 1856
31.00 32.10 0. 0. 0. 30.00 35.20
0. 29.25 31.95 37.05 31.70 26.20 31.80
30 DEC65 KURILE IS 44 12 00. N 148 30 00. E 070. 16 56 56.2
0. 0. 0. 50.25 0. 0. 0. 1707
50.10 51.00 52.08 50.50 49.30 49.20 54.10
52.25 48.27 51.00 50.00 50.60 45.10 50.78
29 NOV65 KURILE IS 45 06 00. N 148 30 00. E 153. 09 00 08.3
55.40 55.75 55.20 54.90 54.95 56.00 55.80 0910
54.70 55.60 56.60 55.05 53.60 53.70 58.75
57.00 53.00 55.37 0. 0. 49.88 55.33
05 APR66 KURILE 44 00 0. N 147 42 0. E 33. 04 57 37.0
38.90 39.32 38.71 38.34 38.42 39.52 39.33 0508
38.14 39.11 40.15 38.50 37.36 37.14 42.29
40.31 36.39 39.12 44.02 38.83 33.31 38.84
12 JAN66 KURILE IS 44 06 00. N 147 30 00. E 033. 01 38 10.0
11.90 12.32 11.76 11.38 11.45 12.55 12.30 0149
11.25 12.20 13.15 11.00 0. 10.10 15.30
13.50 09.40 12.15 17.10 11.85 06.32 11.88
19 FEB66 KURILE 43 54 00. N 147 00 00. E 98. 22 48 55.0
53.67 54.08 53.42 53.10 53.20 0. 54.00 2259
52.90 53.68 54.85 53.30 0. 51.92 57.05
55.25 51.15 53.72 56.82 53.04 48.10 53.60

HONSHU NW 8390 - 9250 KM 307-313AZ

02 APR66 EAST HONSHU 38 42 0. N 141 54 0. E 39. 22 43 21.4
63.78 64.18 63.55 63.20 63.37 64.32 64.04 2254
63.03 64.02 64.68 63.32 62.33 62.30 66.94
65.15 61.49 64.08 0. 63.77 58.53 63.77
23 JUN66 CST HONSHU 38 12 00. N 141 24 00. E 092. 21 51 57.4
37.32 37.50 37.00 36.70 36.95 37.90 37.59 2203
36.40 0. 0. 36.36 35.97 35.80 40.40
38.63 34.98 37.72 41.92 37.21 32.13 37.28
09 MAY66 HONSHU 38 24 . N 139 18 . E 20. 02 57 48.1
41.90 42.30 41.75 41.45 41.45 42.50 42.24 0309
41.22 42.15 43.00 41.55 40.50 40.33 45.00
43.35 39.67 42.10 46.04 42.00 36.71 41.95
14 MAR66 HONSHU 37 06 0. N 140 48 0. E 63. 06 38 06.5
55.78 56.10 55.55 55.28 55.40 0. 56.02 0649
55.00 56.00 56.60 0. 54.30 54.23 58.81
57.03 53.38 56.12 60.52 55.58 50.60 55.73
14 NOV65 HONSHU 36 48 00. N 140 48 00. E 067. 05 54 16.7
0. 0. 0. 0. 0. 65.00 64.55 0605
00.00 64.60 0. 0. 63.00 0. 67.40
65.50 62.00 64.85 0. 64.10 59.40 64.30
03 APR66 EAST HONSHU 36 42 0. N 140 48 0. E 68. 04 43 41.1
31.55 31.95 31.30 31.08 31.20 32.18 31.80 0455
30.90 31.86 32.37 31.10 30.20 30.25 34.65
32.68 29.20 31.85 36.12 31.30 26.53 31.53
18 FEB66 HONSHU 36 42 00. N 140 24 00. E 69. 00 [illegible] 53.6
45.50 45.85 45.30 45.10 45.08 0. 45.60 0039
0. 45.71 46.60 45.10 0. 44.10 48.60
46.78 43.18 46.03 50.12 45.35 40.40 45.50
05 JAN66 HONSHU 35 48 00. N 140 48 00. E 90. 05 46 54.3
45.95 46.22 45.60 45.25 45.40 0. 46.10 0558
00.00 46.20 46.80 45.50 44.50 44.50 49.00
47.10 43.52 46.50 50.40 45.55 40.90 45.85
17 MAY66 E C HONSHU 35 48 . N 140 30 . E 68. 00 59 06.3
0. 62.13 61.55 61.38 61.40 62.38 62.08 0110
61.00 62.12 62.80 61.45 60.45 60.40 64.90
63.00 59.45 62.18 66.35 61.52 56.70 61.80
16 APR66 E HONSHU 35 00 0. N 141 30 0. E 63. 10 13 [illegible].0
24.30 24.62 24.00 23.75 23.85 24.78 24.45 1025
23.60 24.60 25.30 23.80 22.85 22.90 27.38
25.40 21.88 24.80 28.75 23.90 19.25 24.22
05 APR66 HONSHU 37 00 0. N 139 12 0. E 4. 00 51 16.4
22.24 22.54 21.99 21.76 21.76 22.79 22.50 0903
21.53 22.42 23.24 21.61 20.62 20.76 25.16
23.62 19.97 22.50 26.78 22.23 17.13 22.25
14 JUL66 S CST HONSH 35 36 00. N 140 00 00. E 071. 06 18 47.6
45.01 45.30 44.78 44.51 44.59 45.54 45.22 0630
44.24 45.31 46.02 44.56 43.62 43.00 46.01
46.19 42.68 45.45 49.41 44.72 39.93 44.94
11 JAN66 HONSHU 33 42 0. N 137 12 0. E 33. 14 16 32.2
50.23 53.55 50.10 49.77 0. 0. 50.50 1428
0. 0. 51.21 49.65 48.90 48.93 53.12
51.50 48.05 0. 54.00 50.00 45.38 50.22
25 JUN66 S. HONSHU 29 36 00. N 142 06 00. E 049. 01 46 10.4
29.24 29.44 28.94 0. 28.63 29.70 29.36 0158
29.40 0. 0. 28.66 27.84 28.13 32.09
30.04 29.78 30.14 33.22 28.30 24.56 29.14

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27 NOV65 HONSHU-1 30 36 0. N 140 12 0. E 50. 03 04 20.6
38.92 0. 38.70 38.50 38.55 0. 39.10 0316
00.00 39.30 39.55 38.45 37.62 37.75 41.77
0. 38.58 39.00 42.95 38.30 0. 38.85
27 NOV65 HONSHU-2 30 30 0. N 140 12 0. E 41. 03 44 04.9
0. 20.20 25.78 25.65 25.60 0. 20.12 0350
25.20 25.32 26.95 25.40 24.65 24.75 28.80
26.80 23.60 25.55 0. 25.30 21.35 25.90
12 NOV65 HONSHU 30 30 00. N 140 12 00. E 040. 17 52 24.1
0. 0. 0. 0. 0. 0. 44.65 1804
0. 44.90 45.50 44.00 43.20 43.40 47.35
45.50 42.00 45.15 00. 43.80 39.60 44.45
10 MAR66 S OF HONSHU 32 12 0. N 137 30 0. E 382. 04 26 19.6
63.10 63.25 62.78 62.52 62.59 63.02 63.25 0437
62.25 63.35 63.95 0. 61.70 61.72 65.80
64.00 60.80 63.51 67.20 62.67 58.33 63.03
23 MAY66 HONSHU 30 00 00. N 139 48 00. E 028. 08 39 44.4
10.02 10.20 09.73 09.45 09.65 10.55 10.07 0852
09.20 10.30 10.70 09.40 08.72 08.78 12.70
10.72 07.68 10.60 14.00 09.20 05.30 09.85

BONIN-MARIANA-VOLCANO-CAROLINE IS NW 9400 -10900 KM 292-307AZ

19 JUL66 BONIN IS 27 54 00. N 139 06 00. E 554. 06 22 21.0
60.45 60.70 60.21 0. 0. 60.98 60.64 0633
0. 60.87 0. 59.94 0. 0. 63.15
0. 0. 61.23 64.20 59.76 56.08 60.49

05 JAN66 MARIANA IS. 21 48 00. N 146 36 00. E 34. 18 10 00.0
36.18 0. 35.95 35.70 36.00 0. 36.30 1822
35.90 36.69 36.98 35.53 35.12 0. 36.95
36.40 33.65 0. 39.65 34.60 32.10 36.20

10 FEB66 MARIANA IS 20 48 00. N 146 18 00. E 43. 14 21 10.9
50.98 51.08 50.57 50.48 50.72 51.52 50.87 1433
50.26 51.50 51.73 50.18 49.70 50.17 53.73
51.16 48.38 0. 54.30 49.50 46.80 50.89

29 MAR66 VOLCANO IS. 23 42 0. N 142 06 0. E 79. 02 17 00.0
16.08 16.13 0. 15.52 15.75 16.42 16.00 0230
0. 16.38 16.72 15.30 14.64 14.93 16.72
16.55 13.60 17.05 19.02 0. 11.73 15.90

20 NOV65 MARIANA IS 21 54 0. N 143 48 0. E 33. 03 37 31.0
0. 0. 0. 0. 0. 0. 37.42 0350
36.82 37.00 38.02 36.62 36.05 0. 0.
37.65 35.00 38.73 40.82 0. 33.22 37.32

20 APR66 MARIANA IS. 18 48 0. N 146 48 0. E 47. 06 43 00.0
45.02 45.08 44.56 44.53 44.63 45.44 44.89 0655
44.16 45.48 0. 44.22 43.72 44.45 47.62
45.13 42.48 46.60 48.25 43.28 40.98 44.90

20 MAY66 S MARIANA 13 54 . N 146 06 . E 66. 09 14 49.2
0. 51.74 51.25 51.18 51.37 52.03 51.52 0927
50.90 52.15 52.22 50.78 50.38 51.00 54.32
[illegible].78 49.15 53.32 54.74 49.88 47.68 51.50

20 JUL66 SOF MARIANA 13 48 00. N 143 54 00. E 106. 20 50 50.0
54.30 54.34 53.94 0. 0. 0. 0. 2103
0. 54.71 0. 53.43 0. 0. 0.
54.41 51.80 0. 0. 52.58 0. 54.12

07 JUL66 S. MARIANA 12 12 00. N 144 12 00. E 040. 09 46 33.2
48.21 48.27 0. 47.82 47.92 0. 48.03 0959
47.41 48.60 48.72 47.35 46.98 47.53 50.69
0. 45.73 0. 51.22 46.43 44.30 48.12

07 JUN66 CAROLINE IS 11 18 00. N 139 36 00. E 050. 13 59 36.0
08.42 08.48 08.03 08.00 08.20 08.84 08.32 1413
07.65 08.93 0. 07.70 0. 07.65 10.98
08.62 08.05 09.92 11.48 08.88 04.63 08.35

CHINA SEA - RYUKYU - TAIWAN NW 10000 -10790 KM 312-310AZ

04 JAN66 E CHINA SEA 29 30 00. N 127 18 00. E 71. 02 48 53.0
47.60 47.08 47.45 47.07 47.15 48.12 47.87 0301
46.98 47.88 0. 47.29 46.33 46.22 50.05
48.85 45.00 47.75 51.55 47.65 43.05 47.62

21 MAR66 RYUKYU 26 06 0. N 129 05 0. E 33. 06 29 01.0
09.42 09.71 09.25 09.00 09.13 10.00 09.70 0642
08.85 09.60 00. 09.05 08.22 08.28 11.88
10.40 07.35 09.80 13.20 09.17 05.10 09.40

20 MAY66 RYUKYU 25 24 00. N 128 18 00. E 058. 02 53 47.4
0. 57.06 56.62 56.42 56.38 57.28 57.03 0306
56.13 57.02 57.65 56.35 55.52 55.60 59.25
57.85 54.70 57.15 60.00 56.55 52.50 56.80

21 FEB66 N.E. TAIWAN 26 18 00. N 125 42 00. E 103. 13 16 47.0
54.05 54.38 53.90 53.62 53.68 0. 54.32 1331
53.46 54.30 54.98 53.75 0. 52.75 56.45
55.25 52.13 54.22 56.02 54.10 49.70 54.12

16 NOV65 RYUKYU IS 25 24 0. N 125 12 0. E 77. 17 05 37.9
0. 0. 0. 0. 0. 0. 51.95 1718
0. 51.60 0. 51.25 0. 50.40 54.05
52.80 0. 0. 0. 51.60 47.37 51.63

10 JUL66 SW RYUKYU 24 12 00. N 125 12 00. E 028. 16 12 41.5
06.61 06.88 06.50 06.20 06.40 07.18 06.83 1626
06.00 06.93 07.58 06.34 05.30 05.32 08.93
07.70 04.64 06.78 10.30 06.53 02.22 06.64

28 MAY66 TAIWAN 24 24 00. N 122 30 00. E 033. 00 03 56.8
0. 26.72 26.35 25.98 26.07 26.75 26.72 0017
25.82 26.62 27.38 26.17 25.23 25.18 28.82
27.75 24.65 26.50 30.40 26.60 0. 26.42

12 MAR66 TAIWAN 24 06 0. N 122 36 0. E 63. 16 31 21.8
48.02 48.15 47.73 47.42 47.62 48.50 48.05 1644
47.22 48.18 48.95 0. 46.55 46.57 50.29
49.19 46.01 48.00 51.70 48.02 43.50 47.93

23 MAR66 TAIWAN 23 48 0. N 122 48 0. E 51. 00 04 34.7
63.05 63.40 62.90 62.50 62.55 63.45 63.30 0017
62.40 63.18 63.80 62.65 61.70 61.62 65.50
64.20 61.04 63.15 60.62 63.05 58.60 63.00

KAZAKH -SINKIANG N 9510 - 9900 KM 349-353AZ

24 DEC65 KAZAKH 49 54 00. N 078 00 00. E 0. 04 59 58.3

00.00	00.00	00.00	00.00	39.75	40.70	41.10	0512
40.05	39.80	41.25	40.00	39.20	38.28	41.35	
42.65	39.25	37.20	44.00	43.10	36.18	40.47	

20 MAR66 KAZAKH 49 54 . N 78 . E 0. 03 49 58.2

31.20	31.68	31.51	30.95	30.72	31.67	31.98	0602
31.07	30.82	32.00	31.71	30.00	29.22	32.38	
33.60	30.30	28.24	34.95	34.15	27.15	31.40	

29 JUN66 E. KAZAKH 49 54 00. N 078 00 00. E 000. 06 57 58.1

30.50	31.11	30.82	30.32	30.00	30.88	31.21	0710
30.38	30.09	31.58	31.12	29.34	28.44	31.57	
32.90	29.63	27.50	34.20	0.	26.43	30.70	

05 AUG66 E KAZAKH 49 54 00. N 078 00 00. E 0. 03 57 58.1

30.45	30.98	30.82	30.28	30.00	31.00	31.31	0410
30.32	30.10	0.	31.00	29.47	28.58	31.60	
32.90	29.51	27.59	34.20	33.48	26.50	30.72	

21 JUL66 KAZAKH 49 54 00. N 077 54 00. E 000. 03 57 57.8

31.19	31.81	31.57	31.00	30.76	31.77	32.08	0410
31.00	30.63	32.30	31.05	30.19	29.31	32.36	
33.61	30.28	0.	35.00	34.27	27.15	31.45	

21 NOV65 KAZAKH 49 48 0. N 078 06 0. E 0. 04 57 57.9

0.	0.	0.	0.	30.15	31.20	31.45	0510
30.45	30.20	31.70	31.20	29.50	28.00	31.80	
33.10	29.70	27.58	0.	33.50	26.63	30.88	

13 FEB66 KAZAKH 49 48 00. N 78 06 00. E 0. 04 57 57.7

30.73	31.27	31.04	30.51	30.25	0.	31.50	0510
30.50	30.30	31.80	31.32	29.66	28.73	31.82	
33.12	29.84	27.82	34.52	33.73	26.75	30.97	

21 APR66 KAZAKH 49 48 . N 78 . E 0. 03 57 58.0

30.62	31.19	31.01	30.36	30.23	31.13	31.43	0410
30.51	30.29	0.	31.25	29.58	28.72	31.80	
33.03	29.80	27.66	34.47	33.68	26.60	30.93	

13 NOV65 SINKIANG 43 48 00. N 087 48 00. E 059. 04 33 53.0

0.	0.	0.	0.	43.90	44.70	45.00	0446
44.00	.	45.30	44.00	43.10	42.49	45.70	
46.42	43.20	42.00	48.05	46.69	40.15	44.48	

HINDU KUSH AREA N 10300 -10900 KM 000-003AZ

30 APR66 KIRGIZ SSR	41 N	72 06 . E	19.	13 41 09.1			
22.58	23.08	22.97	22.40	22.19	22.90	23.28	1354
22.50	22.16	23.43	23.16	21.55	20.78	23.39	
24.80	21.80	19.02	25.70	25.40	19.04	22.82	
28 JAN66 TDZHK-SMKG	39 18	0. N 073 06	0. E	20.	08 52 02.2		
23.61	24.05	24.06	23.38	23.19	23.98	24.26	0905
23.50	23.20	24.55	24.16	22.80	21.80	24.40	
25.95	22.75	20.92	26.63	26.33	20.10	23.92	
31 MAR66 HINDU KUSH	36 24	0. N 70 48	0. E	200.	23 38 00.5		
0.	0.	0.	0.	0.	0.	0.	2351
0.	0.	0.	0.	0.	10.85	13.32	
14.72	11.90	09.70	15.05	15.45	09.32	12.92	
16 NOV65 AFGHAN-USSR	36 24	0. N 071 12	0. E	241.	01 03 55.7		
0.	0.	0.	05.00	05.55	06.25	06.60	0117
05.75	05.45	.	06.40	04.90	04.05	06.50	
8.00	0.	03.05	08.85	08.60	02.40	06.20	
04 JUN66 HINDU KUSH	36 18 00.	N 070 48 00.	E	207.	05 11 54.2		
0.	0.	06.28	05.77	0.	0.	0.	0525
05.73	05.41	06.50	06.43	0.	04.08	06.54	
07.84	05.20	02.93	08.87	08.60	02.48	06.14	
06 JUN66 AFGHAN-USSR	36 18 00.	N 071 12 00.	E	225.	07 46 16.2		
25.64	26.22	26.08	25.70	25.36	26.00	26.32	0759
0.	25.43	26.45	26.30	24.80	24.00	26.40	
27.90	25.13	23.02	26.74	28.59	22.38	26.02	

E. CAUCASUS NNE 9300 - 9910 KM 018-025AZ

12 JUL66 W. CAUCASUS	44 24 00.	N 037 24 00.	E	026.	18 53 08.5		
36.61	37.12	37.37	36.73	36.09	36.02	37.42	1905
37.08	35.87	37.23	38.04	0.	0.	36.18	
39.38	37.40	32.02	38.70	40.92	34.13	37.10	
02 MAR66 E. CAUCASUS	43 00	0. N 45 48	0. E	24.	02 37 02.3		
49.48	49.96	50.14	49.01	49.00	49.61	50.30	0249
49.82	48.78	50.12	50.70	48.88	47.40	49.28	
51.95	49.93	45.22	51.73	53.30	46.88	49.93	
20 APR66 E CAUCASUS	41 42	0. N 48 12	0. E	19.	16 42 03.7		
60.28	60.75	60.98	60.45	59.80	60.41	61.10	1654
60.68	59.60	0.	61.30	59.70	58.32	60.22	
62.63	60.50	56.22	0.	63.95	57.64	60.72	

YUGOSLAVIA-ALBANIA-GREECE-CRETE-W.TURKEY-MED.SEA NE 8750 - 9850 KM 032-041A/

20 AUG66 YUGOSLAVIA	42 18 00. N	019 36 00. E	022.	12 05 19.0			
22.37	22.96	23.48	22.87	22.10	22.51	23.35	1217
23.32	21.47	22.80	24.20	22.31	20.56	21.30	
25.11	24.16	17.50	23.99	27.65	21.14	23.15	
08 AUG66 YUGOSLAVIA	42 12 00. N	019 48 00. E	33.	02 31 08.0			
10.38	10.78	11.42	10.78	10.05	10.18	11.27	0243
11.25	09.38	10.68	12.15	10.23	0.	0.	
13.00	0.	0.	11.05	15.50	09.00	11.02	
09 AUG66 ALBANIA	40 18 00. N	019 54 00. E	33.	03 34 14.3			
28.30	28.82	29.34	28.75	0.	0.	29.20	0346
29.22	27.42	0.	29.96	0.	0.	27.22	
0.	0.	23.65	29.72	33.36	27.17	29.00	
10 AUG66 ALBANIA	40 18 00. N	019 54 00. E	33.	03 53 42.9			
57.94	58.46	58.98	58.40	57.73	57.84	0.	0405
58.89	57.02	58.29	59.65	57.99	56.11	58.85	
0.	59.66	0.	0.	63.01	56.82	58.58	
06 FEB66 GREECE-BULG	41 24 0. N	025 06 0. E	33.	20 08 06.3			
0.	0.	0.	0.	0.	0.	0.	2020
0.	0.	0.	0.	0.	24.74	0.	
29.43	0.	22.13	0.	31.63	25.32	27.46	
05 FEB66 GREECE 1	39 12 0. N	022 00 0. E	38.	02 01 48.3			
10.32	10.73	11.29	10.70	10.07	10.20	11.22	0214
11.17	09.43	10.67	11.92	10.22	08.42	09.19	
12.78	11.68	05.65	11.08	15.08	09.14	10.93	
05 FEB66 GREECE 2	39 12 0. N	22 12 0. E	45.	02 58 00.6			
22.68	23.12	23.72	23.13	22.43	22.64	23.54	0310
23.59	21.73	0.	24.33	22.58	20.80	21.63	
25.20	24.27	18.00	24.03	27.60	21.48	23.33	
11 JUN66 S. GREECE	37 30 00. N	021 12 00. E	051.	12 05 03.2			
29.22	29.71	30.28	29.70	29.11	29.22	30.04	1217
30.16	28.38	0.	30.85	29.20	27.53	28.13	
0.	30.88	24.60	30.00	34.05	28.22	29.92	
04 JUN66 MEDITRN SEA	36 36 00. N	021 00 00. E	080.	06 16 57.4			
0.	0.	24.49	23.88	0.	0.	0.	0629
24.39	22.88	23.71	25.07	0.	21.73	22.36	
25.85	25.09	18.83	24.82	28.14	22.44	24.08	
07 MAY66 TURKEY	37 48 . N	27 54 . E	12.	13 08 16.0			
59.80	60.22	60.73	60.19	59.60	59.72	60.60	1320
60.57	58.91	60.19	61.35	59.82	58.04	59.01	
62.30	61.13	55.33	0.	64.28	58.45	60.36	
28 NOV65 DODECANESE	36 06 0. N	027 42 0. E	89.	05 26 05.6			
45.95	46.30	46.80	46.30	45.65	45.80	46.75	0538
46.75	45.20	46.15	47.47	45.80	44.22	45.05	
48.20	47.30	41.50	47.45	0.	44.55	46.45	
11 MAR66 CRETE	34 24 0. N	24 24 0. E	22.	20 01 43.8			
34.10	34.50	0.	34.45	33.66	34.01	34.95	2014
34.80	33.21	34.45	0.	34.05	32.34	33.03	
36.25	35.45	29.05	35.25	36.55	33.00	34.71	
09 MAY66 TURKEY	37 12 . N	31 12 . E	125.	03 51 09.4			
48.05	48.52	48.97	48.40	47.83	48.10	48.83	0403
48.80	47.30	48.47	49.50	47.90	46.20	47.20	
50.35	49.19	45.05	49.50	52.20	46.37	48.56	
21 APR66 CRETE	34 48 . N	26 . E	52.	06 45 29.0			
15.45	15.90	16.37	15.88	15.28	15.35	16.20	0858
16.25	14.86	0.	16.98	15.35	13.81	14.58	
17.75	16.86	11.05	16.85	19.80	14.30	16.08	

EASTERN TURKEY NE 9950 -10000 KM 024-025AZ

20 AUG66 TURKEY		39 18 00. N	040 54 00. E		037.	11 59 12.1	
08.35	08.90	09.18	08.57	08.02	08.44	09.12	1212
08.84	07.63	08.88	09.69	07.93	06.49	07.90	
0.	09.04	04.24	10.27	12.30	06.12	08.84	
19 AUG66 TURKEY 2		39 12 00. N	041 06 00. E		033.	13 15 10.1	
07.11	07.65	07.91	07.30	06.82	07.21	07.93	1328
07.60	06.38	07.64	08.40	08.60	05.13	06.66	
09.62	07.84	02.85	09.12	11.12	04.95	07.61	
19 AUG66 TURKEY 3		39 12 00. N	041 06 00. E		047.	14 17 57.5	
52.70	53.22	53.51	52.88	52.34	52.72	53.50	1430
53.17	51.98	53.20	53.98	52.18	50.80	52.30	
55.15	53.42	0.	54.58	56.63	0.	53.20	
19 AUG66 TURKEY 1		39 12 00. N	041 42 00. E		026.	12 22 09.6	
08.42	09.00	09.28	08.62	08.13	08.61	09.36	1235
08.94	07.72	09.03	09.79	08.04	06.52	08.07	
10.90	09.14	04.29	10.40	12.35	06.22	08.94	
07 MAR66 TURKEY		39 06 0. N	41 42 0. E		13.	01 16 05.8	
07.64	08.12	08.44	07.80	07.30	07.76	08.49	0129
08.12	06.82	08.27	09.00	07.21	05.71	07.30	
10.10	08.30	03.53	09.63	11.68	05.45	08.17	

NORTHERN MID-ATLANTIC RIDGE NE 4700 - 5100 KM 049-055AZ

19 JUL66 N ATL RIDGE		55 42 00. N	036 18 00. W		33.	10 08 37.0	
35.68	36.43	37.16	36.32	0.	35.60	0.	1016
37.03	34.27	36.11	36.26	36.00	33.48	33.68	
39.36	0.	28.90	36.82	0.	35.70	36.59	
19 JUL66 N ATL OCEAN		55 30 00. N	035 24 00. W		33.	00 20 11.0	
0.	0.	0.	13.42	0.	0.	0.	0028
0.	11.43	0.	0.	0.	0.	10.82	
0.	0.	0.	13.05	0.	0.	13.78	
13 JUL66 N ATL OCEAN		56 48 00. N	034 06 00. W		024.	10 34 02.8	
68.23	69.02	69.72	68.91	67.93	68.28	69.51	1042
69.54	66.85	0.	70.82	68.47	65.97	66.45	
72.06	71.25	61.53	69.77	75.75	68.02	69.18	
19 JUL66 N ATLNTC OC		55 24 00. N	034 48 00. W		33.	02 05 06.0	
11.50	0.	12.92	12.15	0.	0.	0.	0213
12.92	0.	12.00	14.08	0.	0.	09.50	
15.17	0.	0.	12.60	0.	0.	12.46	
08 APR66 N ATL OCEAN		52 42 0. N	33 12 0. W		33.	05 52 40.4	
59.50	60.11	60.92	60.18	59.20	59.38	60.63	0600
60.88	58.10	59.83	62.02	59.90	57.50	57.30	
62.98	62.77	52.96	60.16	66.62	59.93	60.41	

AZORES IS E 6000 - 6500 KM 065-071AZ

04 APR66 AZORES IS 2		38 12 0. N	31 18 0. W		33.	20 48 38.8	
61.83	62.34	63.18	62.70	61.95	61.51	62.72	2057
63.42	60.70	61.80	63.97	62.81	60.74	58.86	
64.05	65.33	56.22	60.33	67.86	63.95	62.65	
04 APR66 AZORES IS 1		38 00 0. N	31 12 0. W		33.	20 44 56.3	
0.	21.00	21.76	21.42	20.56	20.30	21.43	2054
22.15	19.38	20.45	22.75	21.58	19.46	17.48	
22.85	24.15	0.	19.10	26.60	22.70	21.41	
04 JUL66 AZORES		39 00 00. N	023 54 00. W		33.	23 49 53.0	
0.	46.18	46.68	0.	0.	47.52	46.60	2359
49.17	0.	47.72	0.	0.	46.53	44.97	
50.07	0.	0.	46.66	0.	0.	46.50	

EQUATORIAL MID-ATLANTIC RIDGE E 9000 - 9400 KM 096-101AZ

14 MAR66 MID ATL RDG 00 54 0. N 27 42 0. W 33. 03 21 31.7
48.00 48.20 48.90 48.82 48.51 47.65 48.30 0333
49.30 47.65 47.45 0. 49.25 48.30 45.00
48.18 51.00 45.35 44.70 50.48 51.30 48.48
01 JAN66 MID ATL RDG 00 36 00. N 025 24 00. W 33. 19 25 50.9
00.00 00.00 00.00 00.00 16.60 15.90 16.52 1938
17.42 00.00 15.45 00.00 17.35 16.47 13.22
16.37 19.07 13.45 13.08 18.75 19.22 16.66
12 JUN66 S ATL OCEAN 03 00 00. S 020 12 00. W 010. 20 20 58.1
28.12 28.13 28.80 28.81 28.45 27.70 28.30 2033
29.30 27.50 27.30 29.06 29.40 28.60 25.12
27.97 30.95 25.62 24.60 30.22 31.35 28.49

NORTHERN WEST INDIES ESE 4600 - 5260 KM 112-118AZ

10 SEP66 MONA PASSAG 19 16 00. N 067 54 00. W 028. 21 58 46.8
33.93 33.68 34.57 34.91 34.82 33.20 0. 2206
35.50 33.52 32.27 34.98 36.87 35.95 0.
32.50 38.32 0. 27.07 35.46 41.20 34.25
13 JAN66 VIRGIN IS. 19 06 00. N 064 42 00. W 41. 10 30 51.1
53.90 53.70 54.65 54.88 54.60 53.20 53.92 1038
55.50 53.38 52.40 55.17 56.55 55.45 49.20
52.90 58.45 51.82 47.45 0. 60.68 54.30
16 JUL66 VIRGIN 18 12 00. N 064 36 00. W 130. 20 09 51.1
51.30 51.04 51.98 52.18 51.98 50.51 51.21 2017
52.79 50.80 49.80 52.37 53.98 53.02 46.68
49.98 55.56 0. 44.74 52.87 58.00 51.59
24 APR66 LEEWARD IS 17 42 . N 60 36 . W 33. 23 04 03.0
35.92 35.63 36.62 0. 36.50 35.23 35.88 2312
37.47 35.45 0. 37.15 38.57 37.22 31.37
35.02 40.38 33.58 29.65 38.00 42.00 36.23
15 JUL66 LEEWARD IS. 16 54 00. N 061 30 00. W 089. 08 00 00.7
27.78 27.52 28.70 0. 28.46 26.90 27.72 0808
29.30 0. 26.19 28.95 30.38 29.22 23.22
0. 32.13 25.57 0. 29.68 34.10 28.18

SOUTHERN W. INDIES - VENEZUELA ESE 5660 - 5710 KM 118-121AZ

09 JAN66 WINDWARD IS 11 30 00. N 062 18 00. W 156. 09 11 30.3
17.73 17.32 18.17 18.50 18.40 16.98 17.45 0920
18.93 17.30 0. 18.50 0. 19.67 13.30
16.10 21.60 16.80 11.45 0. 24.12 18.00
14 MAY66 VENEZUELA 10 30 . N 63 . W 16. 20 27 27.4
0. 33.23 34.10 34.43 34.30 32.85 33.30 2036
34.90 33.28 31.92 0. 30.26 35.08 29.30
00. 37.40 32.74 00. 35.06 40.05 33.85

EASTERN MEXICO SE 3400 - 3800 KM 156-165AZ

21 DEC65 GUERRERO MX 16 48 00. N 098 06 00. W 53. 08 41 00.4
0. 0. 0. 0. 12.50 10.70 0. 0847
12.10 12.10 09.20 10.70 14.20 15.60 00.
06.65 13.35 16.30 03.50 06.65 19.20 11.30
22 JAN66 CHIAPAS MEX 17 24 0. N 94 06 0. W 139. 07 36 49.3
54.75 54.20 0. 55.58 55.70 54.25 53.85 0742
55.75 55.32 52.62 0. 57.78 58.85 0.
50.55 57.25 0. 46.80 50.88 62.95 54.72
02 APR66 OAXACA MEX 16 30 0. N 97 24 0. W 42. 01 52 38.3
54.00 53.08 53.75 54.60 54.76 53.28 52.83 0158
54.52 54.53 51.70 53.17 56.65 58.03 50.68
49.30 55.87 58.63 45.86 49.25 61.65 53.73
06 FEB66 MEXICO 15 54 00. N 93 36 00. W 92. 04 12 26.9
49.40 48.75 49.20 50.10 50.30 48.68 48.34 0418
50.20 49.73 47.18 49.03 52.15 53.35 45.80
45.22 51.83 53.25 41.28 45.60 57.40 49.33
19 FEB66 OAXACA MEX 15 24 00. N 94 12 00. W 43. 02 00 44.0
14.80 13.90 14.55 15.28 15.78 0. 13.70 0207
15.50 15.10 12.50 14.30 0. 18.75 11.22
0. 16.90 18.80 06.65 10.55 22.65 14.60
12 JAN66 OAXACA MEX. 15 18 0. N 94 24 0. W 51. 12 29 29.1
60.85 60.20 60.75 61.50 61.88 60.10 59.90 1235
61.65 61.30 58.65 0. 63.65 64.82 57.40
56.40 63.15 65.02 52.80 0. 68.80 60.75
07 MAR66 CHIAPAS MEX 14 30 0. N 93 12 0. W 22. 09 10 54.5
38.12 37.42 38.03 38.85 39.15 37.39 37.18 0917
38.92 0. 35.95 37.85 41.01 42.03 34.58
34.00 40.67 41.87 30.08 34.36 46.14 38.05
09 FEB66 CHIAPAS MEX 14 18 0. N 93 00 0. W 53. 00 55 19.8
61.72 61.03 61.62 62.35 0. 60.88 60.74 0101
62.52 62.11 0. 61.25 64.48 65.51 58.08
57.42 64.20 65.40 53.60 57.81 69.62 61.60
16 AUG66 CHIAPAS 14 18 00. N 092 54 00. W 40. 15 00 46.0
0. 28.62 0. 29.98 0. 0. 28.33 1507
30.05 0. 0. 0. 0. 0. 0.
25.10 31.88 0. 21.20 25.42 37.20 29.18

11 22 66

NORTHERN CENTRAL AMERICA SE 3800 - 4200 KM 149-155AZ

17 JAN66 GUATEMALA 14 00 00. N 091 42 00. W 126. 14 42 22.9 1448

0. 62.05 63.35 0. 0. 62.25
64.15 63.70 0. 62.95 66.10 67.15 59.75
59.30 65.80 66.80 55.35 59.70 71.20 63.30

13 MAR66 HONDURAS 14 24 0. N 88 24 0. W 2/. 21 46 22.0 2153

21.12 20.50 21.26 21.60 22.15 20.40 20.10
22.13 21.38 0. 0. 23.95 24.59 17.31
17.41 24.00 23.80 13.22 18.20 26.90 21.15

04 APR66 EL SALVADOR 13 48 0. N 89 42 0. W 108. 19 50 07.6 1956

0. 56.48 57.11 57.82 56.00 56.20 56.13
57.95 00. 54.95 56.75 59.92 00. 53.46
53.15 59.72 60.18 49.18 53.65 64.90 57.04

07 AUG66 EL SALVADOR 13 30 00. N 089 48 00. W 71. 05 33 40.2 0540

35.64 34.08 35.60 36.34 36.62 34.87 34.73
30.48 30.03 0. 35.49 0. 39.39 32.00
31.70 30.33 26.73 27.68 32.32 43.26 35.55

01 JUL66 EL SALVADOR 13 42 00. N 088 24 00. W 201. 20 17 49.3 2024

0. 0. 0. 0. 0. 0. 0.
0. 34.35 32.00 33.92 36.95 37.43 30.28
30.40 36.90 26.73 26.25 0. 41.85 34.00

16 DEC65 EL SALVA.-A 13 00 00. N 088 48 00. W 33. 05 22 54.0 0529

00.00 00.00 00.00 00.00 64.10 62.40 00.00
64.15 63.42 00.00 63.05 66.00 66.70 59.35
59.35 62.95 62.05 55.32 00.00 70.90 63.15

13 JUL66 NICARAGUA 12 36 00. N 087 42 00. W 061. 08 20 59.4 0827

67.47 66.66 67.57 66.17 66.33 66.70 66.71
68.41 67.70 65.47 67.42 70.32 70.95 63.78
63.90 70.39 70.20 59.72 64.73 75.23 67.42

24 JUL66 CENT AMERCA 12 12 00. N 086 36 00. W 33. 18 50 55.0 1057

0. 0. 0. 0. 66.00 0. 0.
67.98 67.32 0. 66.90 0. 70.54 0.
63.22 69.73 0. 59.15 64.00 74.82 67.02

04 MAY66 NICARAGUA 12 30 . N 87 36 . W 60. 18 13 54.3 1820

64.60 64.00 64.63 0. 65.53 0. 0.
65.58 64.82 0. 0. 67.40 60.13 60.92
00. 00. 67.35 56.67 00. 72.40 64.55

SOUTHERN CENTRAL AMERICA SE 4600 - 5200 KM 144-147AZ

10 JUL66 COSTA RICA 09 54 00. N 083 42 00. W 33. 19 18 59.0
43.82 43.28 43.95 44.55 44.64 43.04 43.19 1926
44.79 43.65 41.88 43.94 46.53 47.00 39.70
0. 40.98 45.87 36.29 0. 0. 43.88

09 APR66 COSTA RICA 09 24 0. N 84 12 0. W 40. 02 34 23.0
66.64 66.12 66.76 67.34 67.56 65.80 65.95 0241
67.65 66.76 64.76 66.70 69.39 69.88 62.70
0. 69.65 68.95 59.14 64.41 74.18 66.62

25 JAN66 PANA-COST R 08 48 00. N 82 48 00. W 71. 16 59 53.0
44.80 44.23 45.01 45.53 45.72 44.11 44.14 1707
0. 44.90 42.88 44.96 47.63 48.08 40.87
41.60 47.87 46.93 37.42 42.89 52.38 44.80

09 MAY66 COSTA RICA 08 24 . N 83 . W 37. 05 30 06.0
62.90 62.32 62.95 63.60 63.70 62.09 62.11 0537
73.86 63.00 61.00 63.00 65.55 66.04 58.85
59.60 65.90 64.95 55.37 60.90 70.32 62.93

01 APR66 SO PANAMA 05 06 0. N 82 30 0. W 39. 15 19 51.8
16.07 15.52 16.25 16.83 16.92 15.31 15.33 1528
17.06 19.18 14.14 16.13 18.68 19.30 12.27
12.87 16.92 18.37 00. 14.03 23.45 16.13

15 APR66 SO PANAMA 05 00 0. N 82 24 0. W 33. 06 42 59.7
24.67 24.20 24.83 25.40 25.59 24.00 24.00 0651
25.65 24.83 22.80 24.77 27.38 27.90 20.88
21.52 27.63 27.00 17.53 22.68 32.00 24.71

NORTHERN COLUMBIA SE 5100 - 5470 KM 133-138AZ

30 MAY86 NO COLUMBIA 07 36 00. N 077 00 00. W 033. 03 09 34.4
0. 0. 59.00 59.46 57.53 57.98 58.18 0317
59.80 58.62 58.80 59.20 61.40 61.75 54.45
56.13 62.22 59.90 61.55 0. 60.32 58.75
29 MAR86 NO COLUMBIA 07 12 0. N 73 42 0. W 185. 10 06 14.0
35.15 35.80 0. 36.95 37.03 35.37 35.70 1014
0. 36.05 34.24 36.03 36.90 39.13 31.86
34.11 37.77 36.83 29.15 0. 43.60 36.23
09 MAR86 N. COLUMBIA 07 00 0. N 73 00 0. W 144. 10 24 44.0
15.57 12.13 15.90 16.40 16.45 14.86 15.11 1033
16.80 15.55 13.74 0. 16.41 18.48 11.27
13.45 19.11 16.30 08.07 15.28 22.92 15.65
21 APR86 NO COLUMBIA 06 54 0. N 73 06 0. W 152. 08 18 23.9
55.40 54.88 55.60 56.16 56.20 54.50 54.83 0826
56.50 55.20 0. 55.82 56.13 56.15 51.02
53.12 50.88 56.10 46.40 55.02 62.65 55.52
24 JUN86 N. COLUMBIA 06 54 00. N 073 06 00. W 142. 20 00 07.0
39.63 39.12 39.90 40.36 40.40 38.85 39.10 2008
40.80 39.54 37.71 40.10 42.33 42.54 35.33
37.52 43.13 40.20 32.61 0. 46.86 39.70
10 APR86 NO.COLUMBIA 06 54 0. N 73 00 0. W 155. 10 33 35.0
65.42 64.97 65.73 66.15 66.38 64.71 65.02 1041
66.65 65.38 63.70 65.90 66.22 66.33 61.12
63.28 66.98 66.13 56.45 65.06 72.60 65.58
30 NOV85 N.COLUMBIA 06 54 0. N 073 00 0. W 139. 09 16 11.6
42.95 42.55 43.15 43.60 43.70 42.15 42.50 0924
44.20 42.90 41.12 43.46 45.60 45.75 38.80
40.70 46.40 00.00 36.00 42.65 50.22 43.15
21 DEC85 N COLUMBIA 06 54 00. N 073 00 00. W 172. 12 25 43.0
0. 0. 0. 13.70 13.80 12.10 12.40 1234
14.10 12.80 11.05 13.40 15.70 15.70 08.60
10.65 10.50 13.65 05.95 12.60 20.00 13.05
20 FEB86 N COLUMBIA 06 54 00. N 73 00 00. W 152. 04 10 27.5
59.08 58.60 59.37 59.92 60.00 0. 58.62 0418
60.32 59.05 57.23 59.02 0. 61.97 54.80
57.03 62.64 59.90 52.12 58.80 66.39 59.22
07 JUL86 N. COLUMBIA 06 54 00. N 073 00 00. W 147. 00 10 30.5
62.52 0. 0. 63.20 63.23 61.68 61.88 0018
63.66 62.40 60.60 62.97 65.20 65.40 58.12
60.40 60.02 63.17 55.50 62.10 69.78 62.53
06 JAN86 N COLUMBIA 05 48 00. N 073 06 00. W 168. 04 19 59.3
0. 29.25 29.90 30.55 0. 28.95 29.40 0428
30.95 29.70 27.90 0. 0. 32.70 25.50
27.50 33.30 30.05 22.75 29.33 30.90 29.95
12 JUN86 N. COLUMBIA 06 30 00. N 073 00 00. W 142. 03 56 20.0
54.11 53.66 54.47 54.66 55.09 53.35 53.59 0404
55.39 54.06 52.27 54.02 56.92 57.10 49.84
52.07 57.70 54.90 47.14 53.60 61.49 54.18

PE U-BRAZIL-ECUADOR SE 0000 - 0900 KM 143-149A2

24 AUG65 ECUADOR 01 30 00. S 077 36 00. W 194. 23 10 08.8

13.42	14.64	15.27	10.12	10.27	14.71	14.82	2019
16.43	13.54	13.54	15.61	18.06	18.57	11.78	
12.73	16.45	17.69	08.68	13.40	22.28	13.40	

28 JAN66 PERU-ECU 03 54 0. S 80 24 0. W 19. 13 29 18.4

51.37	50.82	21.48	22.02	0.	50.71	50.64	1538
0.	51.28	12.96	21.40	23.93	0.	47.85	
48.32	54.02	23.77	44.63	47.62	36.13	51.33	

12 JAN66 PERU-ECUAD 02 18 00. S 077 00 00. W 182. 08 02 09.6

23.00	24.48	25.28	25.05	25.80	24.10	0.	0511
25.98	22.80	0.	23.10	27.60	25.03	21.24	
22.03	27.91	26.94	10.40	0.	31.70	24.95	

29 DEC65 PERU-EC. 03 12 00. S 077 14 00. W 24. 04 08 24.1

00.00	00.00	00.00	00.00	62.26	60.70	60.85	0417
62.40	61.53	59.30	61.50	63.90	64.42	57.67	
58.62	64.35	63.25	54.77	59.77	66.12	61.40	

20 AUG65 PERU-EC BOR 03 12 00. S 077 12 00. W 110. 07 43 27.6

54.60	54.08	54.74	55.36	55.40	53.82	53.97	0752
55.60	54.70	52.73	54.74	57.17	57.08	51.02	
51.86	57.50	56.48	46.00	53.00	61.30	54.60	

23 MAR66 PERU-BRAZIL 07 18 0. S 74 46 0. W 137. 21 57 09.6

07.35	0.	0.	08.13	0.	06.08	06.75	2207
08.33	07.60	0.	07.52	09.90	10.43	04.00	
04.75	10.37	09.35	01.16	06.00	13.75	07.48	

21 MAY66 PERU-BRAZIL 08 06 . S 074 24 . W 160. 07 44 20.8

0.	21.10	21.80	22.36	22.24	20.93	21.02	0754
22.63	21.77	19.86	21.83	24.15	24.81	18.15	
19.05	24.45	23.35	15.33	20.16	27.97	21.63	

09 SEP66 PERU-BRAZIL 08 12 00. S 074 12 01. W 150. 04 04 03.7

07.70	07.14	07.92	08.37	08.45	06.90	07.04	0414
08.67	07.72	09.88	07.90	10.11	10.03	04.10	
05.04	10.24	09.40	01.40	06.20	13.73	07.60	

31 MAY66 PERU-BRAZIL 08 24 00. S 074 10 00. W 154. 06 50 18.9

0.	23.28	24.00	24.24	24.64	23.08	23.14	0900
24.73	23.65	22.07	23.98	26.32	26.78	20.22	
21.13	29.05	25.70	17.24	22.36	30.10	23.77	

13 JAN66 PERU-BRAZIL 08 24 00. S 074 00 00. W 190. 14 17 10.8

12.11	11.85	12.20	12.80	12.85	0.	0.	1427
0.	12.20	10.20	12.32	14.60	15.12	08.32	
14.82	13.80	13.05	05.95	0.	14.45	12.05	

PERU - BOLIVIA SE /400 - 795 KM 142-148AZ

10 JUN66 CST. PERU 14 48 00. S 070 00 00. W 022. 08 13 25.8
17.70 17.25 17.87 18.44 18.58 17.02 17.09 0824
18.63 17.95 15.94 17.65 20.12 20.70 14.42
14.97 20.33 19.83 11.49 15.85 23.63 17.75

19 JUN66 CST. PERU 14 54 00. S 075 54 00. W 029. 15 40 47.6
40.25 39.76 40.45 41.02 41.14 39.60 39.67 1551
41.23 40.47 0. 40.39 42.75 43.38 37.09
37.61 42.96 42.44 34.12 38.48 46.25 40.32

07 JUN66 PERU 15 00 00. S 075 48 00. W 048. 00 59 46.6
36.84 36.27 36.90 37.38 37.82 36.19 36.23 0110
37.70 37.12 0. 36.00 39.20 39.82 33.61
34.24 39.48 38.98 30.69 35.16 42.77 36.85

07 JUN66 PERU 15 06 00. S 075 54 00. W 042. 03 24 17.2
0. 09.35 10.02 10.01 10.70 09.18 09.30 0335
10.86 10.03 0. 09.96 12.42 12.83 08.67
07.18 12.52 11.94 0. 08.04 15.90 09.92

09 FEB66 PERU UST 15 12 0. S 75 12 0. W 54. 15 13 30.1
23.43 23.05 23.55 24.10 24.30 22.78 22.75 1524
24.40 23.65 21.80 23.46 25.86 26.29 20.20
20.90 25.90 25.38 17.38 21.74 29.23 23.42

02 JUN66 S. PERU 15 30 00. S 071 30 00. W 121. 17 05 38.0
0. 34.48 35.03 35.50 35.68 34.18 34.26 1716
35.72 35.02 33.30 35.00 37.22 37.68 31.62
32.51 37.50 36.42 29.00 33.41 40.58 34.88

10 FEB66 PERU 16 42 00. S 73 54 00. W 13. 10 43 30.3
40.27 39.67 40.33 40.84 41.08 39.48 39.54 1054
41.12 40.35 0. 40.25 42.66 43.04 36.94
37.65 42.77 42.02 0. 38.51 45.90 40.16

04 JAN66 S PERU 15 24 00. S 070 54 00. W 189. 12 48 13.2
63.30 62.80 63.50 64.00 64.10 62.60 62.70 1258
64.20 63.45 61.60 63.50 65.60 66.00 60.10
61.00 65.90 64.80 57.50 62.00 68.90 63.35

09 FEB66 PERU 16 42 00. S 72 54 00. W 33. 03 55 00.9
10.45 0. 10.54 11.11 11.25 09.71 09.83 0405
11.36 10.62 08.66 10.54 0. 13.16 07.26
07.96 13.04 12.14 04.52 08.87 16.08 10.43

30 DEC65 S PERU 16 48 00. S 071 12 00. W 118. 06 16 03.9
0. 0. 0. 0. 69.40 0. 67.90 0626
69.35 68.60 66.80 68.52 70.75 71.08 65.20
65.10 71.00 64.92 62.55 67.08 73.90 68.40

02 DEC65 PERU-BOL 16 24 0. S 69 36 0. W 190. 00 36 30.1
0. 0. 0. 0. 28.50 27.00 27.10 0047
28.60 27.75 25.95 27.00 29.95 0. 24.35
25.45 30.20 26.90 22.00 0. 33.10 27.65

02 MAY66 PERU-BOLIV 16 30 . S 68 54 . W 138. 21 34 01.0
08.03 07.50 08.19 08.76 0. 07.32 07.38 2145
08.92 08.09 0. 08.12 10.32 10.53 04.72
05.89 10.60 0. 02.42 06.80 13.40 08.03

15 MAR66 PERU - BOL 16 36 0. S 69 00 0. W 172. 03 46 27.0
31.03 00. 31.18 31.76 31.90 30.35 30.48 0357
31.98 31.20 29.40 31.20 33.37 33.59 27.80
28.82 33.67 32.38 25.40 29.63 36.45 31.03

NORTHERN CHILE - BOLIVIA BORDER AREA ST 0063 - 0500 KM 141-140A2

14 JUNCO CST N CHILE		1M 55 00. S 070 05 00. W			140.	08 54 58.4	
13.00	12.48	13.14	13.00	13.70	12.30	12.30	0900
13.90	13.00	11.20	13.00	13.30	15.53	09.80	
10.84	12.40	14.20	07.40	11.02	18.20	13.03	
02 JAMAN N CHILE		1S 54 00. S 069 36 00. W			131.	03 53 46.0	
00.00	00.00	00.00	00.00	11.90	10.44	10.50	0405
12.03	11.25	09.40	11.23	13.40	13.07	07.90	
09.00	13.05	12.40	03.20	10.00	16.50	11.10	
30 DECAS N. CHILE		1P 08 00. S 069 30 00. W			116.	18 42 44.5	
0.	0.	0.	00.60	00.93	65.47	05.45	1053
66.90	66.20	04.45	66.20	00.30	00.00	62.90	
63.90	66.20	07.25	00.20	00.90	71.35	66.07	
02 HARBOR BOLIVIA		1P 12 0. S 07 00 0. W			274.	03 56 26.0	
32.05	32.30	33.00	33.33	33.66	32.15	32.23	0507
33.70	33.08	01.19	33.00	03.10	35.21	29.63	
30.60	32.40	04.00	27.36	32.02	38.02	32.90	
11 HARBR N CHILE 1		1P 10 0. S 69 12 0. W			115.	01 48 34.8	
59.24	58.70	59.41	59.99	00.00	58.50	58.54	0159
00.20	59.37	57.00	0.	01.40	01.07	58.04	
57.02	01.07	00.51	53.02	58.04	64.30	59.20	
27 DECAS N CHILE		1P 36 00. S 069 24 00. W			117.	11 25 11.2	
00.00	00.00	00.00	00.00	35.75	34.32	34.33	1206
35.85	32.03	33.17	35.00	37.17	37.40	31.75	
32.80	37.40	36.20	00.00	03.75	40.20	34.87	
04 JUNCO NO CHILE		2P 06 00. S 069 24 00. W			099.	18 07 00.8	
0.	29.00	29.64	0.	0.	28.90	28.91	1618
30.43	29.71	0.	29.00	0.	32.02	26.43	
32.49	32.02	30.80	24.00	26.33	34.70	29.65	
08 HARBR CHILE - BOL		2P 00 0. S 69 24 0. W			122.	20 48 12.0	
37.50	36.90	39.54	40.15	40.26	38.77	38.77	2057
40.33	39.51	37.77	0.	41.53	41.69	38.23	
37.30	41.60	0.	33.03	36.18	0.	39.45	
23 HAYES CHILE-BOLIV		2P 30 00. S 068 48 00. W			113.	18 00 16.4	
0.	0.	47.32	47.90	47.90	48.02	46.58	1911
48.07	47.33	45.45	47.30	49.30	49.26	44.03	
45.02	0.	46.45	41.60	45.90	52.30	47.15	
13 JAMES N CHILE		2P 48 0. S 69 18 0. W			110.	19 26 24.0	
54.90	54.90	55.00	55.50	55.70	54.32	54.32	1937
55.80	52.00	0.	0.	57.05	57.30	51.85	
52.05	57.40	56.30	49.50	0.	60.05	54.98	
17 APROS CHILE-BOLIV		2P 42 0. S 68 00 0. W			81.	00 36 37.0	
0.	0.	0.	0.	0.	0.	0.	0050
0.	0.	0.	0.	0.	18.21	12.72	
15.74	10.31	17.15	10.35	14.72	20.90	15.87	
12 JUNCO CHILE-BOLIV		2S 18 00. S 068 24 00. W			099.	00 01 37.0	
12.90	12.40	13.02	13.00	13.00	12.33	12.30	0913
13.77	13.05	11.32	13.02	15.04	15.71	09.70	
10.00	13.30	14.10	07.40	11.77	17.94	12.89	
19 ERIONE CHILE BOLIV		2T 42 00. S 68 24 00. W			112.	12 48 18.8	
50.60	50.60	50.40	51.40	52.70	0.	0.	0454
51.72	51.00	0.	50.90	0.	53.10	47.75	
48.73	50.40	52.10	45.60	49.70	55.80	50.90	
06 JUNCO N CHILE		2Z 48 00. S 070 12 00. W			52.	06 29 27.0	
0.00	09.30	10.00	10.90	10.00	09.20	09.20	0141
12.25	10.00	11.10	08.30	12.50	12.20	08.65	
12.00	12.60	11.20	08.30	08.50	14.00	09.80	

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03 FEB66 CHILE-BOLIV		21 42 0. S		66 24 0. W	116.	00 47 19.2	
0.	0.	0.	0.	0.	0.	0.	0058
0.	0.	0.	0.	0.	58.70	53.40	
54.24	56.85	57.52	51.00	55.25	61.35	56.40	

BOLIVIAN CHILE - ARGENTINA BORDER AREA SE 0530 - 8975 KM 142-148AZ

16 DEC65 N CHILE		22 24 00. S		068 30 00. W	160.	22 46 30.0	
00.00	00.00	00.00	00.00	00.00	00.00	00.00	2258
00.00	00.00	09.85	11.50	00.00	13.75	08.40	
09.22	13.90	12.70	00.10	00.00	16.40	11.50	
11 MAR66 N CHILE 2		23 42 0. S		69 12 0. W	67.	09 30 42.0	
33.32	32.00	33.41	33.96	34.05	32.70	32.65	0942
34.10	33.51	31.67	0.	35.37	35.57	30.28	
31.22	35.55	34.73	27.90	32.03	38.20	33.33	
01 MAR66 N CHILE		23 18 00. S		66 06 00. W	120.	12 21 51.4	
37.12	36.52	37.28	37.71	37.90	36.48	36.48	1233
37.92	37.20	35.44	37.10	39.05	39.30	34.05	
35.05	39.30	38.18	31.82	35.90	41.75	37.10	
26 OCT65 NO CHILE		24 24 00. S		070 12 00. W	055.	12 15 08.3	
0.	0.	0.	0.	6.55	5.15	5.20	1227
0.50	5.95	4.10	5.05	0.	7.85	2.60	
03.50	07.70	07.05	00.40	04.30	10.45	05.67	
19 JUL66 ARGENTINA		23 12 00. S		060 48 00. W	183.	07 25 27.6	
08.17	07.68	08.34	08.82	08.92	07.53	07.56	0737
09.00	08.28	06.54	08.17	10.17	10.34	05.16	
08.25	10.45	09.28	02.98	07.12	12.97	08.22	
07 FEB66 CHILE-ARG		24 48 00. S		68 42 00. W	94.	14 59 48.0	
42.23	41.78	42.32	42.79	42.94	41.56	41.62	1511
42.97	42.41	0.	42.14	44.12	44.36	39.25	
40.05	44.35	43.60	37.03	40.92	46.92	42.22	
06 FEB66 CHILE-ARG		24 12 00. S		67 18 00. W	173.	14 54 30.5	
19.73	19.23	16.78	17.35	17.51	16.08	16.15	1506
17.49	16.06	15.19	16.76	18.64	18.78	13.63	
14.64	18.65	17.80	11.48	15.50	21.33	16.78	
04 JAN66 CHILE-ARG		24 48 00. S		068 12 00. W	90.	14 51 54.0	
50.05	49.52	50.05	50.65	0.	0.	49.42	1503
0.	50.26	0.	0.	52.00	52.28	47.10	
48.02	52.20	0.	44.90	48.85	54.85	50.10	
28 FEB66 N CHILE		20 00 00. S		70 24 00. W	67.	21 38 52.4	
52.47	51.74	52.38	52.66	53.02	51.75	0.	2150
53.04	52.56	50.60	52.20	54.13	54.03	0.	
50.13	54.48	53.70	47.05	50.80	56.90	52.32	
20 OCT65 ARGENTINA		23 54 0. S		065 12 0. W	150.	19 31 37.0	
0.	0.	0.	0.	0.	0.	0.	1943
28.21	27.60	00.	00.	29.40	29.60	00.	
25.43	29.60	00.	22.21	00.	32.10	27.40	
31 JAN66 SALTA ARGEN		24 48 0. S		64 24 0. W	45.	14 01 25.4	
34.47	34.05	34.32	35.00	35.14	33.72	33.75	1413
32.20	34.51	0.	34.43	36.20	36.44	31.45	
32.43	36.35	35.27	29.35	33.38	39.02	34.43	
24 FEB66 SALTA ARG		23 30 0. S		64 30 0. W	25.	06 19 13.6	
25.53	25.35	25.60	26.42	26.55	25.35	25.28	0531
24.63	26.01	24.31	25.05	27.73	0.	22.80	
23.72	25.61	0.	26.72	25.91	30.45	25.85	

CENTRAL CHILE - ARGENTINA BORDER AREA SE 9100 - 9750 KM 146-152AZ

23 OCT65 C CHILE CST	29 24 00. S	071 36 00. W	033.	06 53 32.8			
53.34	0.	53.14	53.92	0.	52.65	52.60	0705
53.90	53.45	51.75	53.05	0.	55.25	50.45	
51.00	55.05	54.75	48.25	51.40	57.55	53.15	
12 JUN66 ARGENTINA	29 00 00. S	068 24 00. W	095.	19 26 21.6			
35.37	34.68	35.40	0.	36.04	34.72	34.73	1938
36.02	35.60	33.90	35.25	37.15	37.45	32.60	
33.35	37.31	36.62	30.55	34.11	39.85	35.36	
13 NOV65 ARGENTINA	29 24 0. S	068 06 0. W	48.	17 59 41.7			
0.	0.	0.	0.	65.10	0.	63.75	1811
65.15	64.55	62.85	64.15	0.	0.	61.60	
62.25	66.30	0.	59.45	62.95	68.70	64.3'	
06 JUN66 CHILE-ARGEN	30 36 00. S	069 18 00. W	109.	09 56 33.4			
52.00	51.57	52.05	52.62	52.69	51.47	51.39	1006
52.72	52.22	50.50	51.85	53.81	54.07	49.39	
49.91	53.92	53.38	47.16	50.61	56.21	52.09	
11 DEC65 ARGENTINA	29 42 0. S	067 00 0. W	029.	13 40 13.0			
0.	0.	0.	41.95	42.10	40.80	40.78	352
42.05	41.60	39.85	41.22	43.18	43.38	38.50	
39.28	0.	42.62	36.45	40.08	45.75	41.32	
10 SEP66 CST C CHILE	31 42 00. S	072 00 00. W	020.	14 12 46.2			
16.04	15.58	16.01	16.57	16.73	15.50	15.30	1425
16.60	16.35	14.60	15.65	0.	0.	13.43	
13.87	17.81	0.	11.14	14.32	20.33	16.02	
14 OCT65 C CHILE	32 18 00. S	071 42 00. W	039.	03 28 08.3			
0.	0.	0.	0.	0.	0.	.	0340
.	06.02	06.45	07.55	0.	09.80	05.30	
05.50	09.50	9.30	03.00	06.15	11.90	07.82	
08 MAR66 S J ARGENT	31 18 0. S	68 36 0. W	102.	02 32 52.7			
16.76	16.25	16.81	17.31	17.48	16.20	16.13	0245
17.44	17.01	15.36	0.	18.55	18.73	14.02	
14.74	18.67	18.13	12.05	15.40	21.05	16.77	
02 DEC65 ARGENTINA	31 18 0. S	068 30 0. W	46.	10 16 27.0			
0.	0.	0.	57.90	58.10	56.75	56.75	1028
57.92	57.60	55.90	57.15	59.10	59.22	54.65	
55.26	59.17	0.	52.50	55.90	61.67	57.35	
23 OCT65 C CHILE	32 24 00. S	071 18 00. W	067.	15 34 47.2			
0.	31.63	0.	32.75	32.65	31.60	0.	1547
0.	32.40	30.65	32.00	0.	34.05	29.55	
29.75	33.80	0.	27.30	30.55	0.	32.10	
12 MAR66 S J ARGENT	31 36 0. S	67 00 0. W	128.	06 58 37.5			
62.35	61.80	62.37	62.90	63.04	61.75	61.71	0710
63.00	62.66	60.81	0.	64.08	64.18	59.52	
60.25	64.21	63.60	0.	60.97	66.22	62.28	
29 APR66 CHILE-ARGEN	35 18 . S	70 42 . W	.93.	03 32 20.2			
57.91	57.38	57.89	58.42	58.56	57.38	57.28	0344
58.51	58.24	56.60	57.69	59.65	59.78	55.42	
55.71	59.50	59.40	53.33	56.28	61.78	57.90	

WESTERN MEXICO S 2800 - 3100 KM 181-185AZ

23 MAY66 REVILLA GIG 21 29 . N 106 42 . W 56. 11 21 30.0
54.05 53.02 53.30 54.35 55.04 53.44 52.50 1156
54.10 55.08 51.83 52.27 50.18 58.43 52.13
48.44 54.08 60.60 46.00 46.45 60.00 53.60

22 MAY66 REVILLA GIG 21 12 . N 106 42 . W 53. 07 42 50.0
15.92 14.92 15.18 16.20 16.86 15.32 14.37 0748
15.91 16.85 13.77 14.17 18.10 20.28 14.03
10.25 12.90 22.41 08.52 08.35 21.93 15.40

08 AUG66 REV GIG IS 19 18 00. N 106 06 00. W 33. 08 02 45.8
30.08 27.19 29.41 30.50 31.05 29.50 28.62 0808
30.12 31.04 0. 26.47 32.36 34.42 28.20
24.52 30.29 36.47 22.60 22.80 30.21 29.62

06 DEC65 JALISCO MEX 18 54 0. N 107 06 0. W 37. 11 34 53.7
0. 0. 0. 40.40 41.00 39.45 38.62 1140
40.15 0. 37.76 38.48 42.61 44.25 37.85
34.52 40.38 0. 0. 32.90 46.38 39.60

30 AUG66 JALISCO 18 42 00. N 107 00 00. W 054. 23 37 19.0
0. 0. 05.98 0. 0. 66.00 65.13 2342
66.70 67.40 64.32 65.10 66.92 70.00 64.40
61.20 67.03 0. 56.93 59.55 72.98 66.15

EAST CENT PACIFIC AND NORTH EASTER CORDILLERA S 4925 - 5675 KM 176-180AZ

10 AUG66 E CENT PACF 02 06 00. N 103 18 00. W 33. 17 47 42.0
0. 51.55 52.00 0. 53.32 0. 0. 1755
52.76 53.11 0. 51.30 54.70 0. 50.08
47.69 53.33 0. 45.15 46.74 0. 52.16

21 JUL66 ESTR-GALOP 03 54 00. S 104 18 00. W 033. 05 32 18.2
14.68 13.17 14.19 15.02 15.52 13.92 13.40 0541
14.84 15.25 12.70 13.44 16.84 18.54 0.
10.05 15.46 0. 07.61 08.92 20.11 14.28

02 SEP66 N EASTER CD 04 30 00. S 105 54 00. W 033. 07 59 05.7
66.31 65.42 65.74 66.56 67.12 65.65 65.03 0807
66.46 67.03 64.45 65.02 66.41 70.10 64.17
61.68 66.75 71.57 59.40 60.41 71.33 65.91

NORTHWEST OF EASTER I. S 7650 - 8000 KM 187-190AZ

06 NOV65 EASTER I 22 16 0. S 113 48 0. W 33. 09 21 48.6
0. 0. 0. 0. 54.25 52.95 52.21 0932
53.25 54.33 51.88 51.75 54.72 56.60 52.18
49.50 53.25 56.35 46.60 46.00 00. 53.08

09 NOV65 EASTER I 22 18 0. S 113 42 0. W 33. 21 59 04.3
0. 0. 0. 0. 0. 0. 0. 2210
10.00 11.15 0. 06.60 11.60 13.50 09.05
6.35 10.10 0. 05.40 04.60 14.00 09.90

05 NOV65 EASTER I 22 18 00. S 113 54 00. W 033. 10 03 27.0
0. 0. 0. 0. 0. 0. 40.00 1014
41.05 0. 39.60 0. 0. 44.30 0.
37.40 41.08 46.23 36.38 35.70 44.88 40.87

SOUTH AND WEST OF EASTER I. S 6100 - 9025 KM 182-188AZ

08 APR66 EASTER 26 12 0. S 114 24 0. W 33. 14 07 53.9
0. 20.92 21.08 0. 22.48 21.25 0. 1419
21.58 22.57 20.25 20.25 23.08 24.75 20.53
17.93 21.60 26.42 0. 16.05 25.15 21.32

09 APR66 EASTER 27 30 0. S 113 36 0. W 33. 04 07 52.0
26.65 0. 25.88 26.60 27.38 26.13 25.37 0419
26.52 27.50 25.00 25.10 27.97 29.64 25.30
22.75 20.40 31.24 21.80 21.22 30.05 26.18

24 NOV65 EASTER I. 30 00 00. S 114 42 00. W 33. 03 12 43.0
32.65 31.68 32.00 32.95 33.45 32.15 31.50 0324
32.50 33.40 31.05 31.10 33.92 35.02 31.30
28.80 32.42 37.30 27.85 27.15 0. 32.20

29 NOV65 EASTER I 32 30 0. S 109 00 0. W 33. 18 50 31.0
32.88 32.07 32.28 0. 0. 32.30 31.73 1902
32.80 33.52 31.20 31.50 34.20 35.60 31.30
29.25 0. 36.70 0. 27.83 0. 32.48

24 MAR66 EASTER 33 00 0. S 109 00 0. W 33. 07 24 52.0
56.98 56.25 56.35 0. 57.63 56.42 55.83 0736
57.04 0. 0. 55.52 53.40 59.65 55.45
53.48 56.95 00. 52.13 51.85 60.35 56.59

05 APR66 EASTER 34 48 0. S 109 42 0. W 33. 18 34 53.0
07.36 00.60 06.86 07.68 08.11 0. 06.23 1847
07.41 07.93 0. 06.05 0. 09.92 05.78
03.90 07.45 0. 02.61 02.55 10.56 06.97

SAMOA - TONGA IS. REGION WSW 9560 -10400 KM 239-244AZ

12 MAR66 SAMOA 15 00 0. S 175 30 0. W 35. 14 19 38.0
18.20 17.63 17.35 17.95 18.39 18.04 17.23 1432
17.52 19.00 17.70 0. 17.64 19.02 19.45
15.85 15.86 22.22 17.55 13.28 16.53 17.75

12 MAR66 TONGA 15 42 0. S 175 00 0. W 33. 14 26 57.6
39.25 38.54 38.36 38.93 39.37 38.93 38.22 1439
38.49 0. 38.64 0. 38.60 39.95 40.36
36.77 36.75 43.10 38.48 34.28 37.43 38.71

20 NOV65 TONGA IS 15 24 0. S 174 30 0. W 12. 03 47 52.4
0. 0. 0. 0. 0. 0. 61.22 0400
61.40 62.88 61.50 60.45 0. 0. 0.
60. 59.72 65.95 61.00 60. 60.25 61.68

05 JUL66 TONGA 15 12 00. S 174 54 00. W 252. 03 22 45.2
05.18 04.45 04.20 04.02 05.27 04.90 04.13 0335
04.33 0. 04.45 03.42 0. 05.80 0.
02.75 02.69 00.93 04.46 0. 03.27 04.61

02 JAN66 TONGA IS. 16 00 00. S 174 00 00. W 111. 03 33 54.4
0. 0. 0. 30.95 0. 0. 30.15 0346
30.45 32.00 00.52 29.46 30.00 31.95 32.30
28.70 28.78 35.10 30.47 26.30 29.50 30.72

26 DEC65 TONGA IS. 16 24 0. S 174 42 0. W 300. 16 44 44.0
0. 0. 0. 61.05 61.45 61.10 60.33 1056
60.52 62.00 60.65 59.55 60.65 61.90 62.40
0. 56.80 65.10 60.55 56.40 59.40 60.80

20 MAR66 TONGA-1 17 00 0. S 174 30 0. W 117. 07 47 50.2
30.10 29.41 29.23 29.89 30.47 30.10 29.12 0800
29.50 30.09 29.55 28.52 29.55 30.95 31.35
27.60 27.09 34.02 29.39 25.19 28.40 29.69

08 JUL66 TONGA 19 00 00. S 174 30 00. W 005. 22 12 23.2
25.09 24.47 24.20 24.05 25.30 24.88 24.10 2225
24.42 25.08 24.40 23.42 24.00 25.00 26.16
22.60 22.71 29.10 24.26 20.20 23.50 24.63

29 MAR66 TONGA 20 00 0. S 175 10 0. W 95. 10 42 15.1
11.05 10.41 0. 10.80 11.22 10.80 10.00 1055
10.32 11.00 10.38 09.20 10.52 11.90 12.20
08.60 04.85 15.05 10.25 0. 09.48 10.60

27 MAR66 TONGA-2 21 00 0. S 174 30 0. W 95. 09 04 31.8
29.46 28.77 28.63 29.22 29.65 0. 28.51 0917
28.82 30.22 28.68 27.80 29.00 30.40 30.56
26.97 27.26 33.40 26.73 24.63 28.01 29.02

16 MAR66 TONGA 21 12 0. S 174 18 0. W 66. 12 13 02.4
63.80 63.15 63.00 0. 63.95 63.58 62.73 1225
63.13 64.58 63.05 62.06 63.30 64.65 64.82
61.20 61.67 67.70 62.93 58.90 62.30 63.35

21 MAY66 TONGA IS 20 54 00. S 175 18 00. W 075. 10 50 59.8
0. 60.60 60.41 61.02 61.50 61.03 60.27 1103
60.53 62.10 60.78 59.02 60.80 62.22 62.45
58.80 59.15 65.13 60.53 58.52 59.80 60.80

15 MAR66 TONGA 20 54 0. S 175 24 0. W 65. 10 40 40.7
43.77 43.21 42.65 43.55 43.80 43.55 42.75 1053
43.07 44.59 0. 0. 43.35 44.67 44.80
41.35 41.51 47.00 42.80 38.03 42.20 43.35

01 JUN66 TONGA IS 23 29 00. S 174 54 00. W 024. 11 47 33.1
46.71 46.01 47.00 46.45 46.92 46.43 47.62 1200
47.43 47.45 0. 47.03 46.20 49.58 49.82
46.14 46.61 52.50 47.70 43.03 0. 48.25

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27 JUN66 TONGA 22 42 00. S 175 48 00. W 060. 08 38 45.8
56.45 55.76 55.01 56.22 56.65 56.22 55.46 0651
55.75 57.23 55.78 54.67 56.00 57.30 57.51
53.97 54.30 00.23 55.00 51.76 54.96 56.02

FIJI IS. REGION WSW 10100 -10725 KM 239-246AZ
09 DEC65 FIJI IS.=2 17 42 00. S 178 18 00. W 650. 13 25 40.7
0. 0. 0. 40.50 0. 40.65 39.90 1337
00.00 41.54 00.00 39.20 40.10 41.44 41.97
38.50 38.40 94.50 40.33 38.33 39.00 40.35
04 DEC65 FIJI IS.=1 17 00 00. S 178 12 00. W 650. 13 12 55.5
0. 0. 0. 39.50 36.10 39.62 39.00 1324
55.13 56.72 55.35 54.30 55.25 00.00 57.12
53.62 53.60 59.85 55.50 21.35 54.10 55.50
20 FEB66 FIJI IS 17 59 00. S 178 30 00. W 583. 06 11 54.4
61.42 60.92 60.86 61.12 61.20 0. 60.53 0023
60.75 62.23 60.95 59.65 0. 62.02 62.66
59.22 59.04 62.04 61.05 36.43 59.23 61.05
26 JAN66 FIJI IS 17 56 0. S 178 30 0. W 579. 09 27 34.3
41.64 41.06 40.79 41.30 41.78 41.48 40.70 0439
40.91 0. 41.05 0. 41.02 42.22 42.85
39.39 39.27 45.39 41.10 37.07 39.73 41.18
27 JAN66 FIJI IS. 17 56 00. S 178 30 00. W 600. 02 01 36.7
42.13 41.56 41.24 41.62 42.19 41.95 41.16 0213
41.45 42.80 41.32 40.98 41.80 42.78 43.38
39.83 39.70 49.69 41.60 37.60 40.22 41.68
10 MAR66 FIJI 19 18 0. S 177 00 0. W 320. 12 15 19.4
52.54 51.67 51.08 52.25 52.65 53.26 53.70 1227
51.80 53.21 51.92 0. 51.98 50.83 52.11
0. 50.24 36.26 51.98 47.97
24 MAR66 FIJI 21 30 0. S 179 24 0. W 191. 04 04 55.5
48.30 47.55 47.91 48.02 48.45 48.13 47.25 0417
47.42 47.04 0. 48.85 47.80 49.11 49.50
45.80 49.10 32.84 47.25 43.58 46.80 47.90
15 NOV65 FIJI IS 16 48 0. S 177 54 0. W 421. 20 00 19.0
0. 0. 0. 0. 0. 0. 42.70 2112
42.90 44.50 43.07 42.00 0. 0. 0.
41.59 41.26 0. 43.16 39.15 41.80 43.25
21 DEC65 FIJI IS. 19 06 0. S 177 36 0. W 360. 1 30 10.2
0. 0. 0. 36.00 0. 38.80 38.65 1902
38.22 0. 38.40 37.40 0. 39.70 40.04
39.62 39.70 42.61 38.20 34.45 37.63 38.50
25 OCT65 FIJI IS.=4 17 00 00. S 179 12 00. W 625. 02 57 57.9
0. 0. 0. 63.12 63.30 63.20 62.50 0309
62.71 64.20 62.81 61.30 62.01 64.00 64.55
61.13 62.11 62.23 62.74 58.71 61.70 62.95

25 DEC65 FIJI IS.-6 18 06 00. S 179 06 00. W 620. 20 16 43.6
0. 0. 0. 48.45 49.25 49.05 48.30 2058
48.42 49.85 48.55 47.55 00.00 00.00 00.00
00.00 48.75 52.90 48.80 44.65 00.00 48.70
17 DEC65 FIJI IS. 18 00 00. S 179 18 00. W 620. 02 21 27.0
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25 DEC65 FIJI IS.-5 18 06 00. S 179 12 00. W 620. 19 20 45.1
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26 MAY66 FIJI 21 12 00. S 178 54 00. W 230. 18 30 07.4
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17 JAN66 FIJI IS. 20 48 0. S 178 30 0. W 543. 17 49 59.3
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16 APR66 FIJI 21 06 0. S 178 36 0. W 511. 15 23 29.3
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08 FEB66 FIJI IS. 21 12 00. S 178 30 00. W 529. 10 02 09.0
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17 MAR66 FIJI 21 06 0. S 179 12 0. W 626. 15 50 32.2
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13 APR66 SO FIJI IS 23 36 0. S 179 54 0. W 550. 04 27 54.8
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29 JUL66 SOLOMON IS 10 30 00. S 162 48 00. E 75. 11 46 15.6
0. 47.32 46.98 47.28 47.54 0. 46.98 1159
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05 AUG66 SOLOMON IS 10 54 00. S 162 10 00. E 93. 04 33 07.4
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01 AUG66 SOLOMON IS 10 12 00. S 161 06 00. E 70. 03 23 03.1
39.68 39.30 38.98 39.20 39.44 39.80 39.01 0336
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28 AUG66 SOLOMON 04 36 00. S 155 12 00. E 509. 10 03 03.0
51.29 51.06 50.62 50.78 51.05 51.47 50.75 1015
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16 NOV65 N ATL RIDGE 31 00 0. N 041 30 0. W 17. 15 24 42.9
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00.00 47.20 47.30 50.00 49.40 00.00 0.
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15 JUL66 N ATLNTC RD 35 24 00. N 030 24 00. W 33. 02 26 15.0
0. 26.06 0. 0. 0. 0. 0. 0235
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0. 0. 0. 0. 31.48 0. 26.49

25 JUL66 N ATLNTC RD 12 12 00. N 043 54 00. W 33. 11 42 01.0
0. 22.84 23.80 23.74 0. 22.38 0. 1152
24.42 0. 21.86 24.36 0. 23.60 19.02
22.67 20.82 0. 18.36 0. 0. 23.36

17 DEC65 MID ATL RDG 08 36 00. N 039 24 00. W 33. 06 17 24.7
00.00 00.00 00.00 00.00 22.60 21.65 22.40 0628
00.00 21.50 21.15 23.55 24.10 22.90 18.50
22.00 25.90 19.45 17.90 24.80 26.50 22.75

15 NOV65 MID-ATL RDG 00 16 0. S 010 42 0. W 24. 11 18 49.9
0. 0. 0. 0. 43.15 42.50 43.00 1131
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43.15 45.25 40.00 0. 45.30 45.30 43.10

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29 JUL66 CHASE MIL 36 36 00. N 074 06 00. W 1. 04 36 24.8 0441
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40.10 60.52 26.02 54.30 64.42 0.

21 OCT65 E MISSOURI 37 30 00. N 091 00 00. W 022. 02 04 38.3 0207
0. 0. 0. 0. 60.00 57.55 58.60
0. 50.15 0. 00.25 62.72 62.25 51.70
57.00 0. 57.60 0. 0. 0. 59.30

03 APR66 COLORADO 39 21 47. N 104 27 44. W 0. 10 21 33.5 1623
24.00 22.40 22.60 24.05 25.15 0. 21.33
23.72 22.27 0. 21.25 0. 0. 21.25
15.42 24.13 33.40 13.11 13.42 33.55 23.00

23 JAN66 NEW MEXICO 37 00 0. N 106 54 0. W 10. 01 56 38.0 0158
40.40 50.65 59.15 60.05 61.80 59.50 0.
0. 61.70 57.00 0. 63.10 66.25 58.00
52.00 60.00 69.80 49.20 49.62 69.10 59.40

17 MAR66 UTAH 41 48 0. N 111 24 0. W 15. 11 47 49.0 1149
40.07 19.28 18.63 00.00 21.80 00.00 18.01
17.20 23.08 18.80 18.56 21.72 26.00 22.56
13.30 10.84 32.70 15.92 00.53 24.54 19.67 .05 .20

12 SEP66 LO CALIFORN 39 24 00. N 120 00 00. W 008. 16 41 01.7 1043
53.52 64.17 63.10 64.02 65.95 65.42 63.00
73.32 67.25 64.50 61.23 64.96 66.83 66.75
59.36 59.32 0. 64.10 62.55 63.82 64.07

23 OCT65 WASH STATE 47 30 0. N 122 24 0. W 23. 16 27 59.3 1630
0. 0. 0. 0. 0. 61.40 0.
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70.00 53.05 0. 0. 53.90 51.75 59.75

MISCELLANEOUS ********NO AVERAGE********** KM

01 DEC85 S. ALGERIA 24 00 0. N 002 00 0. E 0. 10 29 58.0
0. 0. 0. 0. 44.33 44.10 44.95 1042
45.40 43.53 44.32 0. 44.75 43.18 42.63
46.33 46.62 40.10 44.47 46.08 44.82 44.83
20 JUL86 N EASTER CR 13 15 00. S 111 24 00. W 33. 13 22 54.0
0. 57.93 56.10 0. 0. 0. 57.00 1332
58.79 59.70 57.07 57.27 0. 0. 57.32
54.52 58.07 64.05 52.96 52.90 62.83 58.35
02 SEP86 GULF CALIF 26 48 00. N 110 48 00. W 034. 21 20 17.0
0. 51.09 51.20 0. 0. 51.06 50.40 2124
52.00 0. 49.75 49.90 54.40 57.22 51.02
45.70 51.67 60.97 44.02 0. 58.62 51.64
10 SEP86 S PACIFIC 11 14 24 00. S 132 48 00. W 033. 06 40 36.8
41.98 41.02 40.98 42.05 42.64 41.52 40.52 0651
41.43 43.00 40.62 39.64 43.03 44.90 41.82
37.81 41.00 47.74 36.27 35.53 44.20 41.40
23 JUL86 ON CHARLIE 54 30 00. N 134 54 00. W 33. 19 34 57.0
0. 27.50 26.40 0. 26.51 28.23 0. 1939
25.40 0. 29.25 26.01 0. 0. 33.20
29.35 22.05 0. 0. 0. 17.32 26.78
12 AUG86 S OF ALASKA 52 54 00. N 161 36 00. W 31. 20 16 59.8
0. 57.22 56.29 56.10 56.48 57.74 56.91 2023
55.62 57.72 0. 55.66 0. 55.48 0.
58.17 52.72 58.80 63.13 55.23 49.80 56.62
17 JUL86 BERING SEAA 55 30 00. N 160 54 00. W 33. 01 03 03.6
0. 19.01 0. 0. 18.13 0. 18.89 0110
17.30 0. 20.32 17.90 0. 0. 0.
0. 14.72 0. 25.51 18.23 11.12 18.36
26 AUG86 ALASKA 67 16 00. N 161 54 00. W 014. 10 19 34.8
29.41 30.06 29.33 28.79 28.72 30.30 30.18 1026
29.63 29.50 31.29 29.32 27.04 26.50 33.66
32.67 20.22 28.22 37.03 31.56 21.01 29.48
22 MAR86 N. E. CHINA 37 30 0. N 117 00 0. E 11. 05 11 33.7
28.55 20.80 28.55 28.05 28.02 29.01 29.01 0424
29.13 29.65 27.00 28.53 27.20 0. 0.
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30 AUG86 LAKE BAIKAL 51 42 00. N 104 24 00. E 033. 06 10 33.4
32.64 33.18 32.82 32.29 32.29 33.22 33.39 0422
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30 JUL86 SVANYA ZILA 84 33 00. N 104 12 00. E 29. 20 32 00.7
41.71 42.56 42.37 0. 41.00 42.38 42.97 2040
41.71 41.01 43.08 42.04 40.01 38.38 0.
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09 JUL86 SEVERNAYA 65 10 00. N 092 54 00. E 033. 06 57 52.0
29.52 30.47 30.28 29.46 28.87 30.12 30.98 0706
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02 JAN86 BAFFIN BAY 74 56 0. N 71 12 0. W 33. 11 51 48.0
0. 0. 0. 12.15 11.30 12.60 13.80 1156
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13. ABSTRACT

Travel-time data at the SDL, as read from LASA films for approximately 400 events, are presented for users. These data have been used for computing travel-time anomalies which are included in SDL reports No. 147 and No. 159 .

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